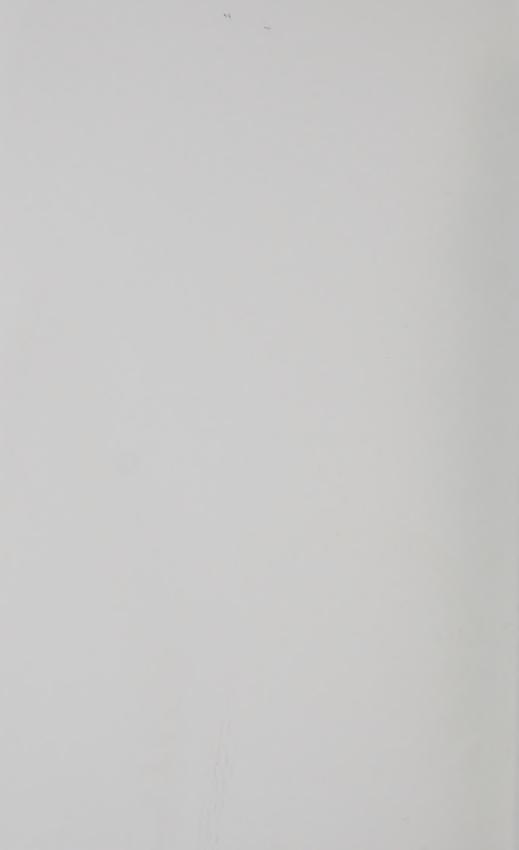
FORSYTH TECHNICAL INSTITUTE



FORSYTH TECHNICAL INSTITUTE General Catalog 1983-1985

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The provisions of this publication are not to be regarded as an irrevocable contract between the student and Forsyth Technical Institute. The Institute reserves the right to make changes in the regulations, courses, fees, and other matters of policy and procedures as deemed necessary. The Institute further reserves the right, at any time, to request a student to withdraw when such action is considered to be in the best interest of the Institute.

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The catalog committee appreciates all the assistance and effort that went into the completion of our catalog.



A Message From The President

Forsyth Technical Institute is one of fifty-eight institutions in North Carolina which make up the Community College System. With an "open door" admissions policy, it is the intent of the Institute to provide educational opportunities for any student wishing to apply. Every effort is made to provide programs to meet the needs of the students. The instructional programs are planned and periodically updated to allow for maximum success in securing and retaining employment.

This catalog may well hold the key to your future educational success and personal happiness. As you review the program offerings, you will see many technical and vocational programs which are open to you at FTI. Your enrollment and successful completion of one of the programs may be the best investment you could make toward reaching your career goals.

You are the reason for the existence of the Institute. The decision as to whether to take advantage of the educational benefits is up to you. The administration and faculty are prepared, ready, and willing to assist you and provide the best instruction available in the North Carolina Community College System.

You will find FTI has a modern physical plant containing shops, laboratories, and classrooms designed to meet your educational and training needs.

Programs for self-improvement of the adult community are offered by FTI. Adults may enroll in classes to improve existing skills, achieve competency in subject areas leading to a high school diploma, or receive instruction in other academic, avocational, or technical fields.

Should you make the decision to enroll at Forsyth Technical Institute, I welcome you to our family and hope you will be successful. I hope your experiences will bring you success and happiness in the future. I urge you to take full advantage of the opportunities at your community's educational institution.

Please feel free to contact any member of the faculty, staff, or me if you need assistance.

Bob H. Greene

Bob H. Greene

President

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FORSYTH TECHNICAL INSTITUTE

Academic Calendar

1983-84

FALL QUARTER August 22, 1983 — November 14, 1983

August 22 Faculty Orientation (FWD) August 23 & 24 Registration (FWD'S) August 25 First Day of Classes August 30 Last Day to Add Classes September 5 Labor Day Holiday September 20 Last Day to Drop without Penalty October 6 Staff Development Day November 10 Last Day of Classes November 11 Grade Posting (FWD) November 14 Faculty Work Day

WINTER QUARTER November 15, 1983 — February 14, 1984

November 15 & 16 Registration (FWD'S) November 17 First Day of Classes November 22 Last Day to Add Classes November 24 & 25 Thanksgiving Holidays December 14 Last Day to Drop without Penalty December 23 Classes End at Close of School Day December 26-30 Christmas Holidays January 2 Classes Resume January 25 Staff Development Day February 10 Last Day of Classes February 13 Grade Posting (FWD) February 14 Faculty Work Day

SPRING QUARTER February 15, 1984 — May 11, 1984

February 15 & 16

February 17

First Day of Classes

February 22

Last Day to Add Classes

March 14

Last Day to Drop without Penalty

April 10 Staff Development Day
April 20 Student Holiday (FWD)
April 23 Easter Monday Holiday
May 7 Last Day of Classes
May 8 Grade Posting (FWD)

May 9 Graduation (FWD)
May 10 & 11 Faculty Work Days

SUMMER QUARTER May 14, 1984 — August 17, 1984

May 14 Registration (FWD)

May 15 First Day of Classes

May 18 Last Day to Add Classes

June 7 Last Day to Drop without Penalty

July 4 Independence Day Holiday

July 31

Last Day of Classes

August 1

August 2

Grade Posting (FWD)

Graduation (FWD)

Two-Week Vacation

SPECIAL SUMMER SESSION (Dates to be announced)

FORSYTH TECHNICAL INSTITUTE

Academic Calendar

1984-1985

FALL QUARTER August 20, 1984 — November 12, 1984

August 20 Faculty Orientation (FWD)
August 21 & 22 Registration (FWD'S)
August 23 First Day of Classes
August 28 Last Day to Add Classes
September 3 Labor Day Holiday

September 18 Last Day to Drop without Penalty

November 8Last Day of ClassesNovember 9Grade Posting (FWD)November 12Faculty Work Day

WINTER QUARTER November 13, 1984 — February 15, 1985

November 13 & 14 Registration (FWD'S)

November 15 First Day of Classes

November 20 Last Day to Add Classes

November 22 & 23 Thanksgiving Holidays

December 12 Last Day to Drop without Penalty
December 21 Classes End at Close of School Day

December 24 – 26

December 27 – 28

December 31 – January 1

January 2

February 12

February 13

Christmas Holidays
Faculty Work Days
New Year's Holidays
Classes Resume
Last Day of Classes
Grade Posting (FWD)

February 14 – 15 Faculty Work Days

SPRING QUARTER February 18, 1985 — May 13, 1985

February 18 – 19

February 20

First Day of Classes

February 25

March 12

Registration (FWD'S)

First Day of Classes

Last Day to Add Classes

Last Day to Drop without Penalty

April 5
April 8
Easter Monday Holiday
May 9
Last Day of Classes
May 10
Grade Posting (FWD)
May 12
Graduation (FWD)
May 13
Faculty Work Day

SUMMER QUARTER May 14, 1985 — August 16, 1985

May 14

May 15 First Day of Classes May 20 Last Day to Add Classes June 7 Last Day to Drop without Penalty July 4 Independence Day Holiday July 31 Last Day of Classes Grade Posting (FWD) August 1 August 2 Faculty Work Day August 4 Graduation (FWD) Two-Week Vacation August 5 - 16

Registration (FWD)

SPECIAL SUMMER SESSION (Dates to be announced)





GENERAL INFORMATION

HISTORY AND PURPOSE

Forsyth Technical Institute can trace its beginning to early adult and high school vocational courses which were available in Winston-Salem. In 1958, a Chamber of Commerce Study Committee recommended that an Industrial Education Center be built to provide the trade and technical training needed by local industry. A bond issue provided the money to start construction of two buildings late in 1959, and the first adult classes were begun in October of 1960. In 1963, a third building was constructed, and new technical programs were added. That same year the North Carolina Legislature passed the Community College Act, creating a statewide system of Community Colleges, Technical Institutes, and Industrial Education Centers. In January, 1964, the name of the school was changed to Forsyth Technical Institute. The operation of the school was transferred from the Winston-Salem/Forsyth County Schools to a local board of trustees who govern the Institute following policies established by the State Board of Community Colleges and the State Department of Community Colleges.

The purpose of Forsyth Technical Institute is to prepare people for gainful employment and effective community membership. The major objective of the curriculum programs is to develop within the student a vocational or technical proficiency to meet the expanding advances in industry, business, and health occupations. The Institute is also dedicated to the concept of continuing education through the Adult Continuing Education Program directed toward self-improvement in cultural, avocational, and vocational pursuits.

The course of study at Forsyth Technical Institute seeks to attain the stated purpose of the institution by

- (1) providing effective teaching to all who enroll;
- (2) providing educational opportunities for adults who discontinued their formal training before mastering the basic skills in general education;
- (3) providing vocational training for students who are preparing to enter skilled trades;
- (4) providing technical training for those persons wishing to enter the more highly skilled occupations in business, industry, and health services;
- (5) providing technical, vocational, and enrichment courses on a part-time basis for adults now employed.

EQUAL OPPORTUNITY/AFFIRMATIVE ACTION

Discrimination

Forsyth Technical Institute is an equal opportunity institution, in compliance and agreement with the provisions set forth in Title VI of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973. No person shall be discriminated against on the basis of race, sex, religion, age, national origin, or handicap, if otherwise qualified.

Special Provisions for Handicapped Persons

It is the intent of the Institute that all courses of study be accessible to all qualified students. Handicapped persons should provide approximately one quarter of advance notice in order to identify any special equipment needs and to facilitate adjustments in programs, facilities, or schedules, if needed.

Grievance Procedures

Applicants, employees, and students of FTI may lodge grievances involving alleged violations of rights under the provisions of Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973 with the Affirmative Action Officer or the Vice-President for Student Services.



LOCAL ADVISORY COMMITTEES

Each program of study at Forsyth Technical Institute has its own advisory committee. The committees are composed of representatives of local businesses, industries, and education and community organizations.

The advisory committees provide the necessary contact between the Institute and the community in an effort to maintain current and relevant programs of instruction to meet the needs of the community.

LOCATION AND FACILITIES

The Institute is located at 2100 Silas Creek Parkway in the southwest section of Winston-Salem. It is easily accessible from U. S. Highway 52, North Carolina Highway 150, and Interstate Highway 40. The main campus houses modern laboratories, shops, and classrooms. Arrangements have also made space available at the Allied Health buildings of North Carolina Baptist Hospital and Forsyth Memorial Hospital for nursing and Health Technology programs.

Off-campus Individualized Learning Centers are located at the Forsyth County Public Library on West Fifth Street, Whitaker Care Center of Forsyth Memorial Hospital, and Paddison Memorial Library in Kernersville.

HOURS OF INSTRUCTION

Day classes are scheduled between the hours of 7:00 a.m. and 5:30 p.m., Monday through Friday. Evening classes meet between the hours of 5:30 p.m. and 11:00 p.m., Monday through Friday. Some Adult Continuing Education courses are offered on Saturday mornings.

Students in nursing and allied health programs can expect clinical practice to be scheduled between the hours of 6:30 a.m. and 11:00 p.m., seven days a week.

ACCREDITATION

Forsyth Technical Institute is accredited by the Southern Association of Colleges and Schools.

The Associate Degree Nursing program and the Practical Nurse Education program are accredited by the North Carolina State Board of Nursing, and the Health Technology programs are accredited by the American Medical Association.

The Institute is a member in good standing of the American Association of Community and Junior Colleges.

Electronics Engineering Technology, Manufacturing Engineering Technology, and Mechanical Drafting and Design Engineering Technology are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).



PROGRAMS OF STUDY ASSOCIATE IN APPLIED SCIENCE DEGREE

Architectural Technology Associate Degree Nursing Banking and Finance

Business Administration

Business Administration — Accounting Option

Early Childhood Specialist

Electronic Data Processing — Business

Electronics Engineering Technology

Executive Secretarial Science — Word Processing/Machine Transcription Option

Executive Secretarial Science — Word Processing/Shorthand Option

Industrial Management Technology

Manufacturing Engineering Technology Marketing and Retailing

Mechanical Drafting and Design Engineering Technology

Nuclear Medicine Technology

Ornamental Horticulture

Police Science Technology

Radiologic Technology

Real Estate

Respiratory Therapy Technology — Therapist

DIPLOMA PROGRAMS

Air Conditioning, Refrigeration, and Heating

Automotive Body Repair

Automotive Mechanics

Building Trades Drafting

Carpentry

Diesel Truck Maintenance and Repair

Electrical Installation

Electronic Servicing
Graphic Arts — Printing

Machinist

Plumbing

Practical Nurse Education

Respiratory Therapy Technology — Technician

Welding and Metal Fabrication

Some programs of study may be available both day and evening. For specific information, contact the Admissions Office.

ADULT CONTINUING EDUCATION

Adult High School Program
General Adult Enrichment Program
Comprehensive Employment and Training Act Program
New and Expanding Industry Training Programs
Special Seminars and Workshops
Management Development Training
Vocational-Technical Extension Programs

Adult Basic Education



ADMISSIONS ADMISSION REQUIREMENTS

Forsyth Technical Institute is an Equal Opportunity Educational Institution and operates under an "open door" admissions policy. Admission to the Institute does not, however, imply immediate admission to the program desired by the applicant. Before a prospective student is admitted to a specific curriculum, placement tests will be scheduled and counseling interviews may be arranged. This process helps the student to evaluate his/her potential for success in his/her chosen field. When an evaluation of test scores and other evidence indicates a lack of readiness to enter a specific program, the student may be approved for the Pre-Technical or the Pre-Vocational programs or he/she may be encouraged to reexamine his educational and occupational goals.

Forsyth Technical Institute will accept credit from other technical institutes and colleges. For specific information refer to "Transfer Students."

Admission to Associate Degree Programs

High school graduation, or the equivalent, is required of all applicants for degree programs. The high school equivalency certificate or the state adult high school diploma is acceptable in lieu of a regular high school diploma.

Applicants for the associate degree programs who are not high school graduates may arrange to complete high school in the Adult Continuing Education program or take the high school equivalency examination (GED) at the Individualized Learning Center.

Applicants for admission to the Mechanical Drafting and Design Engineering Technology and Manufacturing Engineering Technology must present one unit of algebra and one unit of geometry. Electronic Data Processing, Architectural Technology, and Electronics Engineering Technology applicants must present one unit each in algebra. Applicants for admission to associate degree health programs must present one unit in algebra, one unit in biology, and one unit in chemistry. Applicants for Associate Degree Nursing must have completed the unit of chemistry within a five-year period. High school physics is recommended for Engineering Technology and Health Technology curriculums.

Any applicant who does not meet course requirements may take courses as a special credit student any quarter prior to admission to a curriculum or enroll in the Individualized Learning Center courses. Deficiencies must be made up before admission to a curriculum.

Applicants for associate degree programs should submit scores on either the Scholastic Aptitude Test (SAT) or the Comparative Guidance and Placement Test (CGP). Information concerning the Scholastic Aptitude Test may be obtained from local high school counselors or the Institute's Career Guidance Center in Student Services. Information on and registration for the Comparative Guidance and Placement Test is available from the Student Services Office at Forsyth Technical Institute.

Applicants for Health Technologies may be subject to approval by the Health Admissions Committee. The members of the Admissions Committee come from instructional and administrative staff of the health curriculums and Student Services staff. The purpose of the committee is to evaluate all available data concerning each applicant.

The committee is mindful that much of the clinical training involves the student working with patients in local hospitals, that their role is constantly being expanded with increasing responsibilities, and that the program must educate and train in anticipation of future demands. A majority of the committee must concur that an applicant meets minimum criteria before he/she is admitted. If the program's enrollment quota is filled before all applications are received, late applicants are informed that they may reapply for the following year.

NOTE: The North Carolina Board of Nursing has State Statutes that identify reasons for prohibiting licensure for Associate Degree Nursing and Practical Nurse Education graduates. The reasons will be presented during the Admissions process.

Any female student in Radiologic Technology or Nuclear Medicine Technology who is or becomes pregnant during the clinical portion of the training must notify the Department Chairperson and Division Dean and will be advised of the possible harmful effects exposure to radiation may have on the developing fetus.

Applicants for Nuclear Medicine Technology and Radiologic Technology must be 17½ years old by their enrollment date (Radiation Safety Hazard Regulation for minors).

Admission to Diploma Programs

Applicants for one-year vocational programs must be high school graduates or meet North Carolina equivalency certificate (GED) standards. For non-high school graduates with special needs, however, exceptions may be made under certain circumstances in all vocational programs except Practical Nurse Education and Respiratory Therapy Technology.

Applicants who are not high school graduates may arrange to complete high school in the Continuing Education Adult High School program or take the high school equivalency examination (GED) at the Individualized Learning Center. Applicants may be admitted into some vocational programs on the basis of high school records. However, scores on the SAT or the CGP may be required. Questions concerning the need for testing should be directed to the Admissions Office.

Because of the specialized nature of the vocational programs, one unit of high school algebra is recommended for Air Conditioning, Building Trades Drafting, Electrical Installation, Electronic Servicing, Machinist, and Practical Nurse Education. High school geometry is also recommended for Building Trades Drafting and Machinist; biology is also recommended before entering Practical Nurse Education. Algebra I, biology, and chemistry are required for entry into Respiratory Therapy Technology.

Admission to the Practical Nurse Education program may also be subject to approval by the Health Admissions Committee.

Admission to Continuing Education and Extension Programs

Persons enrolling must be 18 years or older. Further information concerning admissions and registration procedures may be obtained from the office of the Dean of Adult Continuing Education.

ADMISSION PROCEDURES

An applicant for admission to any degree or diploma program should:

- Obtain an application form from the Admissions Office or from a high school counselor.
- 2. Submit the properly completed application to the Admissions Office.
- 3. Arrange to take the Comparative Guidance and Placement Test (CGP) through the Student Services Office. Scholastic Aptitude Test (SAT) scores may be substituted for the Comparative Guidance and Placement Test.
- 4. Request that a transcript of all high school and post high school academic work be sent directly to the Admissions Office.
- 5. Submit recommendations if requested.
- 6. Report for a personal interview, if requested, on the date scheduled by the Admissions Office. At this interview test scores and previous academic records will be evaluated and the applicant will be advised as to eligibility for admission to the desired program. If a personal interview is not required, the student will be notified of his status in writing.
- 7. Submit a properly completed health appraisal form when requested.

Students who are currently enrolled and wish to be considered for another curriculum must update an application in the Admissions Office.

SPECIAL INFORMATION FOR FOREIGN STUDENTS

Forsyth Technical Institute does not issue the I-20 Form required by the United States Office of Immigration for foreign students to study in the United States. The Institute will be glad to help interested students in gaining information about colleges and universities that do offer the I-20 Form. Foreign students under other types of visas are considered for admission through normal admission procedures.

Applicants graduating from high schools outside the United States must demonstrate high school proficiency through satisfactory scores on either the GED or the Comparative Guidance and Placement Test. Applicants graduating from colleges and universities outside the United States will be required to take the CGP entrance exam.

READMISSIONS

Students who have withdrawn in good academic standing should contact the Admissions Office to update their application. If the application for readmission is for a different curriculum, standard admission requirements for new students will apply.

Students who have withdrawn while on academic probation or who have been suspended for academic deficiencies must reapply through the Admissions Office. Approval for readmission for the same curriculum or an alternate selection will be based on the applicant's ability and aptitude, the time elapsed since withdrawing, recommendations of the Academic Review Committee, and the applicant's career objectives. Students granted readmission may have course load restrictions, specific grade requirements, and/or required counseling sessions in order to remain enrolled in the curriculum. When good academic standing has been reestablished, the restriction(s) will be removed.

There are specific additional guidelines for reentry into some of the health programs such as Associate Degree Nursing and Practical Nurse Education. Please refer to the current student handbook for the specifics on reentry to these programs.

Former students who reapply for admission may be asked to supply the Admissions Office with transcripts and test scores.

Students who have been suspended for disciplinary reasons cannot be readmitted without submitting a request for approval from the Dean of Admissions and Counseling.



TRANSFER STUDENTS

Applicants who have attended other institutions of higher learning may transfer credits in courses comparable in content, objective, quality, and credit hours to those offered at Forsyth Technical Institute. Direct transfer of credits may be granted if the student is transferring from a regionally accredited institution or is a member of the North Carolina Community College System. Provisional transfer credit may be granted if the student is transferring from an institution that is not regionally accredited or is not a member of the North Carolina Community College System but is recognized by the Council on Post Secondary Education (see "Provisional Transfer Credit" section).

No grade lower than a "C" may be transferred from other institutions. Courses taken on "Pass/Fail" basis will be considered only after receiving information on requirements necessary to receive a "Pass" grade. All final transcripts for transfer work should be received at least two weeks before enrollment. Determination of transfer credit for questionable courses will be made by the Director of Admissions and Recruitment after consultation with appropriate departmental chairpersons. A written evaluation will be sent to the student.

Credits transferred from other schools will be reflected on students' transcripts as hours earned and will not be used in the computation of grade point averages. When a student transfers between curriculums within Forsyth Technical Institute, credits attempted, including grades, hours earned, and quality points, will be forwarded to any curriculum where the courses are identical. A student's initial cumulative grade point average in a new curriculum will be computed from the credits forwarded to that curriculum. For courses that are not identical but comparable, credit will be granted in the same manner as courses transferred from another institution. Such courses will not be used in computing grade point average; only hours earned will be transferred.

Many courses with a technical or skill content have time limitations on the acceptance of transfer credit. This includes credits earned at other institutions and/or credits earned at Forsyth Technical Institute. Generally, courses in this classification taken more than five years before entry into the Institute cannot be considered for transfer purposes. A complete list of these courses and the specific time limitations are maintained by the Director of Admissions and Recruitment. In such instances, students may challenge out-of-date courses by proficiency examinations when appropriate and available.

Inquiries concerning transfer credits granted must be made to the Director of Admissions and Recruitment during the student's first quarter of enrollment. If the student is not satisfied with the transfer credit as granted, requests should be made in writing to the Director of Admissions and Recruitment who will confer with the appropriate Divisional Dean. After deliberation between the Divisional Dean and the Director of Admissions and Recruitment, the student will be notified as to the final decision on transfer credit to be granted.

PROVISIONAL TRANSFER CREDIT

Students transferring from an institution not regionally accredited but recognized by the Council on Post-Secondary Accreditation (COPA) may be granted provisional transfer credit under the guidelines and procedures as set forth by the Office of Student Services and approved by the President.

- 1. Any applicant from institutions that are not regionally accredited or that are not members of the North Carolina Department of Community Colleges must meet all the requirements for admission as an entering student in the specific curriculum.
- 2. Upon receipt of an official final college transcript, credit will be determined according to FTI curriculum guidelines, and the student will be notified of courses provisionally accepted toward graduation. Grades lower than a "C" will not be considered for transfer. Courses completed on a "pass/fail" basis can be considered only upon receipt of information on requirements necessary to receive a pass grade.
- 3. Student must satisfactorily complete 24 quarter hours of credit academic work at FTI before provisional transfer credit is officially accepted and recorded on FTI transcript. The term "satisfactory" means the student has a minimum 2.00 cumulative grade point average in FTI course work and meets any other academic requirements necessary to continue in the specific curriculum at the Institute.
- 4. It will be the responsibility of the student to request that provisional transfer credit be officially accepted after the minimum quarter-hours-in-residence have been met. The request should be made to the Registrar.
- 5. Between initial enrollment and acceptance of transfer credit, students must complete prerequisite courses at Forsyth Technical Institute.

NOTE: In some technical or skill-level courses proficiency examinations (when appropriate and available) might still be necessary to determine proper academic placement.

TRANSFER OF EARNED CREDIT BETWEEN FTI PROGRAMS

Credits earned in any FTI two-year program may be credited toward a degree or diploma program upon evaluation and acceptance by the Director of Admissions and Recruitment. Credits earned in a diploma program are not acceptable for transfer to an associate degree program but may be credited toward a second diploma major.

REGISTRATION

The Institute operates on an 11-week quarter system. Students pursuing diploma or degree programs must register at the beginning of each quarter. All students are expected to register on specific dates listed in the calendar for the academic year.

Tuition and fees must be paid on the registration day.

PREREGISTRATION

The preregistration period for continuing students is held during the latter part of each quarter. During this period, each continuing student is expected to meet with his/her advisor to determine his/her schedule of courses for the upcoming quarter. Any questions arising during this preregistration period concerning transfer credit for course(s) should be directed to the Director of Admissions and Recruitment. A preregistration period is conducted for new students that have been approved for admission. New student preregistration is held after the continuing students' preregistration.





ORIENTATION FOR NEW STUDENTS

All new full-time students are expected to participate in an orientation program conducted by members of the faculty, staff, and student government. Part-time students are also urged to participate. The purpose of orientation is to acquaint the student with the administrative personnel, faculty, and student leaders. The regulations, policies, and privileges of the Institute as set forth in the catalog and Student Handbook are discussed and interpreted. Specifics are presented on departmental rules and schedules for individual curriculums that entering students will be required to be familiar with in their future quarters.

LATE REGISTRATION, SCHEDULE CHANGES, AND DROP/ADD

Registration closes at the end of the drop/add period. (The academic calendar will list the length of the drop/add period.) Late registration is allowed if

- 1. the class is not cancelled or closed:
- the student has the consent of his/her advisor and of the Office of Student Services and has met admission and prerequisite requirements;
- 3. the student pays a \$5.00 late registration fee in full at the time of late registration, unless he/she registers late at the request of the Institute.

All class schedule changes must be approved by the student's advisor and notification of such changes submitted to the Registrar's Office.

GRADUATION GRADUATION REQUIREMENTS

A student wishing to receive a degree or a diploma from the Institute must fulfill all course requirements. All students must earn a cumulative grade point average of 2.00 and must have received a passing grade in all required courses to be eligible for graduation.

A student who has earned a cumulative grade point average of 3.50 is eligible to be graduated with high honors.

A student who has earned a cumulative grade point average of 3.00 is eligible to be graduated with honors.

Grade Point Average (GPA) is obtained by dividing the total quality points earned by the total number of credit hours work attempted.

A candidate for an associate degree must complete at least 32 quarter hours of credit work at the Institute, with a minimum of 16 quarter hours in the major area. A candidate for vocational diploma must complete at least 16 quarter hours of credit work at the Institute, with a minimum of eight quarter hours being in the major area courses. Credit hours required in residence may not be met by proficiency examination.

Course requirements vary according to program. The student should refer to the course requirements for his/her program of study to determine if all requirements have been met and should be aware at all times of his/her progress toward graduation.

It is also the responsibility of the student to complete an official INTENT TO GRADU-ATE form at least six weeks before his/her last registration. These forms may be obtained from the faculty advisor, who will assist the student in completing the form and will submit the form to the Registrar's Office.

COURSE NUMBERING SYSTEM

Courses are numbered in accordance with the system approved by the North Carolina Department of Community Colleges.

- 1. Each course is designated by a three-letter prefix indicating the general subject area.
- 2. A number indicating a specific course within an area follows the letter prefix according to the following rules:

a.	Pre-Technical courses	0001-0099
b.	Technical courses	0100-0299
C.	Vocational courses	1000-1099
d.	Adult Continuing Education courses beyond high school	2000-3099
	5 Section Section Beyond High School	2000-3099

GRADING SYSTEM

The following grading system is generally used by Forsyth Technical Institute:

No. Grade	Letter Equivalent	Description	Quality Points Per Quarter Hour
94-100	Α	Excellent	4
86-93	В	Good	3
78-85	С	Fair	2
70-77	D	Passing	1
Below 70	F	Failing	0
Withdrawal	W		
Passing	WP		
Failing	WF		
Incomplete	Inc		
Audit	Υ		

The letter equivalent system is used for recording and reporting grades.

W - Withdrawal

An official Withdrawal is the grade given to a student who withdraws from a course through the 18th day of a quarter.

WP — Withdrawal Passing

Withdrawal Passing is the grade given to the student who at any time after the 18th day of the quarter withdraws from a course with a passing grade.

WF — Withdrawal Failing

Withdrawal Failing is the grade given the student who at any time after the 18th day of the quarter withdraws from a course with a failing grade.

Withdrawals (WP, WF)

A student may not withdraw from a class after the 50th day of the quarter without permission of the instructor.

How to Withdraw

Every student who is considering withdrawing from a class or from school should contact the instructor, advisor, or Student Services to discuss the decision to withdraw.

Withdrawal from a class It is the student's responsibility to notify the instructor, advisor, or Student Services in person or in writing of the decision to withdraw and complete form 500 A- One Class Drop Form.

2. Total Withdrawal from School

A student who must withdraw from school prior to graduation, either permanently or temporarily, should make an official withdrawal. The student should notify Student Services either in person or in writing and complete forms 500 B- Multiple Class Drop form and 500 C- Withdrawal Information Sheet. This information is necessary to assure that the student's status at the time of withdrawal is clearly identified in order to expedite reentry, transfer of credit to another institution, or to provide potential employers with accurate educational information. Veterans and Financial Aid recipients must notify the Office of Student Financial Services. The last day of class attendance will be the official drop date for the class.

I - Incomplete

The grade of Incomplete is given only if a student has a valid reason for failure to complete the work on schedule. Illness, absence on company business, or other circumstances beyond the student's control are considered valid reasons for noncompletion of work. The student must have advised his/her instructor of the circumstance prior to the end of the quarter and have been granted an incomplete grade. The instructor must have specified the work to be made up in order to remove the incomplete and a date within the following quarter by which the work must be completed. If the conditions necessary to remove the incomplete will require additional hours of instruction, the student must reregister for the course. If, on the other hand, the student needs only to complete work without instructional supervision, this must be completed no later than the following quarter or the course must be repeated.

Any student who receives an incomplete on a course that is a prerequisite for another course must make up the incomplete work by the end of the drop/add period if he/she is registered for the next succeeding course. Should the student fail to remove the incomplete by the end of the drop/add period, he/she must drop the course which is dependent on the prerequisite.

If the incomplete is not removed by the end of the quarter immediately following the quarter it was granted, it will remain permanently recorded.

Y - Audit

Any audit of courses must have prior approval of the appropriate Division Dean. The Audit Request form is available in the Registrar's Office and must be submitted to the Registrar's Office for processing before the end of Drop/Add.

Students auditing courses are not required to take examinations or hand in written work but may do so if they wish. No grade or credit toward a degree or diploma is given. Audit may not be changed to credit or credit changed to audit after the last day of drop/add. Normal attendance policies will apply.

HONORS AND HIGH HONORS LISTS

Soon after the end of each quarter, in order to honor students who have earned outstanding scholastic records, the Institute identifies those students for the honors and high honors lists. In order to be named to the honors list, a student must take a minimum of 12 quarter hours of credit work and earn at least a 3.00 GPA, but less than a 3.50 GPA. In order to be named to the high honors list, a student must take a minimum of 12 quarter hours of credit work and earn at least a 3.50 GPA.



ACADEMIC REGULATIONS ACADEMIC STANDING

To be in good academic standing, a beginning student must have earned a grade point average of 2.00 by the end of the first quarter, and a cumulative grade point average (GPA) of 2.00 must be maintained thereafter.

A student who does not earn the required grade point average in any quarter will be placed on academic probation for the following quarter.

A student will automatically be removed from probation when he/she earns the required cumulative GPA.

A student on academic probation who does not earn the required grade point average in the next quarter may be required to register for a reduced load, or he/she may be required to withdraw from the program. The student may be directed to a more suitable curriculum.

Students in some curriculums may have special grade progression policies. These policies will be given to the student at the beginning of course study. Students who do not meet the requirements of these policies will be dropped from the curriculum.

Each student enrolled in the Institute is expected to be aware of his/her academic status at all times and to be responsible for knowing he/she has failed to meet the requirements for continuing in school. Instructors, faculty advisors, and counselors in the Office of Student Services are available for conferences, but it is the responsibility of the student to seek extra help if it is needed.

At the end of each quarter, each departmental Academic Review Committee meets to review students' academic standing. If a student's standing is changed in any way, other than removal from probation, the student will be notified in writing by the respective division dean.

ACADEMIC APPEAL

When a student wishes to appeal the decision of the departmental Academic Review Committee, he/she must appeal in writing to the appropriate division dean within 24 hours after the date of receipt of grades.

The Dean will convene the division Academic Appeal Committee which will hear the appeal and make a recommendation to the Dean. The Dean will make the final decision and notify the student, the department chairperson, and the advisor in writing.

COURSE REPEAT RULE

The last grade earned on a repeat course, whether "F" or higher, will be the grade computed for GPA. Withdrawal grades ("W", "WP", or "WF") will not be considered as repeat grades.

If a student fails any course in his/her trade or technical curriculum, he/she must repeat the course until a passing grade is received; otherwise, he cannot receive the State Vocational Diploma or the Associate of Applied Science Degree. The student is responsible for scheduling makeup courses required for graduation.

If a student fails one of the courses in the major subject area, he/she may be referred to the Office of Student Services for counseling.



FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974

The Family Educational Rights and Privacy Act of 1974 provides many safeguards regarding the confidentiality of and access to student records.

- 1. Students may review their educational records by making a written request to the Registrar.
- 2. Student records will not be reviewed by "third parties" unless permission is obtained in writing from the student. Exceptions may be made for teachers and administrators if the information is for educational purposes. Exceptions may also be made for parents who claim the students as dependents and for credentialing, auditing, or accrediting organizations. The Dean of Admissions and Counseling will make the final decision concerning access to records.
- Official transcripts will be issued only when a written request is received from the student.
- 4. Forsyth Technical Institute does not publish or distribute directory information or any personally identifiable information.
- Authorities with court orders are permitted to review records in the presence of Student Services staff.

SEALED RECORDS

A student's records may be sealed from the student's review and closed for purposes of readmission and grade posting due to financial debt to the school or litigation involving the student and the school. Inquiries regarding sealed records should be directed to the Dean of Admissions and Counseling. Transcripts will not be issued as long as the file remains closed.

ADVISOR/ADVISEE PROGRAM

Because problems of communication often impersonalize student-faculty relationships, Forsyth Technical Institute has an advisor-advisee program, which is designed to provide a more personal atmosphere for the student and to increase communication between students and faculty. Each student at Forsyth Technical Institute is assigned an advisor from his/her own curriculum. Through periodic conferences between the student and advisor, it is hoped that the student will be better able to choose his/her academic program from quarter to quarter and that potential problems can be solved.

Each advisor will post regular office hours so the student can arrange conferences to discuss or explore any problem or condition. The advisor will assist the student during preregistration and registration. Students are not allowed to register without proper advising.

Each student is assured that all discussions are confidential and that when necessary, he/she may be referred to other guidance resources to help with particular concerns.



ATTENDANCE

- 1. Class attendance is calculated from the first officially scheduled class meeting which includes the drop/add period through the last scheduled meeting.
- 2. Students will be informed in writing at the beginning of the quarter when an instructor **requires special attendance rules** for the course. The Health Division curriculums have additional special attendance rules that must be followed.
- 3. A student must satisfy his/her instructor that he/she should be permitted to remain in a course and attend classes after incurring any absence in excess of the following:
 - a. three (3) regular one-hour class sessions
 - b. two (2) practicum (shop, laboratory, or clinical experience) sessions which meet for two or more hours
 - c. two (2) regular one-hour class sessions, and one (1) practicum (shop, laboratory, or clinical experience) session which meets for two or more hours
- 4. When a student is absent from a class and practicum (shop, laboratory, or clinical experience) session which meets consecutively, each session missed will be counted as an absence.
- 5. Students have full responsibility for accounting to their instructors for absences.
- 6. Students are expected to report for class and practicum (shop, laboratory or clinical experience) on time. Habitual **tardiness** may, at the discretion of the instructor, be considered in computing class attendance.
- 7. Students are expected to attend all class, laboratory, shop, and practicum sessions. No passing grade will be issued for a course if, for whatever reason, a student has been absent for 25 percent of the total possible class time per course per quarter.

STUDENT CLASSIFICATION

Full time: A student who is enrolled in 12 or more quarter hours of course work.

Part time: A student who is enrolled in fewer than 12 quarter hours of work.

Special: A student who is enrolled in credit courses but who is not working

toward a degree or diploma. A special student must meet the regular

admissions criteria. (See Special Credit Policy.)

Audit: A student who is enrolled in regular course work but who is not receiving

credit for work undertaken.

Freshman: Any student who has earned fewer than 45 credit hours.

Sophomore: Any student who has earned 45 credit hours or more.

SPECIAL CREDIT POLICY

A special credit student is one who is taking one or more curriculum credit courses but who is not enrolled in a specific curriculum. Special credit students are permitted to register for credit courses without having to be admitted as a regular curriculum student, provided prerequisite requirements have been met and that such registration does not preempt students enrolled in a degree, diploma, or certificate program. Some credit courses will not be available to special credit students without prior departmental approval.

For admission to Forsyth Technical Institute, a special credit student needs to complete the student application and have official transcripts sent to the Admissions Office. All special credit students are required to take the Comparative Guidance and Placement Test unless it is waived by the Admissions Office. Satisfactory completion of courses as a special credit student does not guarantee admission to a regular curriculum. Special credit students must submit an updated application and meet regular admission requirements if they desire to be approved or reclassified as a curriculum student.

Generally, students are approved for special credit status in the following circumstances:

- The student desires to take some relevant credit courses prior to his/her being able
 to start a specific curriculum. The student may desire to complete these courses
 before entering that curriculum in order to reduce course load once in the program
 and thus improve chances for success.
- 2. The student desires to take specific credit courses, but his/her educational goals do not include pursuing and completing a curriculum at Forsyth Technical Institute.
- The student who has been denied admission into a specific curriculum that has already reached its quota at the time of his/her application but wishes to complete the related courses.

Special credit students are assigned an advisor and may take a maximum of 15 hours in any one quarter while classified as special credit. When a student reaches 30 credit hours, he/she will be advised to seek admission into a curriculum program, but there are no limitations on the number of credit hours earned by a special credit student. All credit hours will be evaluated for application to curriculum admission when and if the special credit student applies.

All general school policies, rules, and Code of Conduct apply to special credit students. Special credit students are not eligible for any form of financial aid through the Institute; however, in some cases veterans may qualify for veterans benefits in cases such as "denied admission" described above in number 3.

Those students who are determined to be in the Pre-Technical program based on CGP test scores are not eligible to be considered as special credit students.

GRADE REPORTS AND TRANSCRIPTS

Shortly after the end of each quarter, student grade reports are available to students in the Registrar's Office.

Transcripts of the student's records cannot be sent to other schools, prospective employers, or to the student himself, unless an official written request is made by the student to the Registrar's Office.

Grade reports and transcripts are withheld until all student obligations to the Institute have been met.

GUIDELINES FOR INDEPENDENT STUDY

Independent study provides an alternate means for a student to earn credit for certain required courses. It should be used only when it has been determined that it would create an unreasonable hardship for the student to wait for the course to be available. Guidelines to be used are as follows:

- To be considered for independent study, the student must file an independent study request form with his/her advisor who will review the request and forward it with suggestions to the division dean for final action. The form should be completed during preregistration, and the student must register for the course during the regular registration period.
- 2. Acceptable reasons for allowing a student to take an independent study are: (1) one-time course sequencing difficulties, (2) scheduling problems that were no fault of the student, (3) needing the course for graduation at the end of the quarter.
- 3. A student will not be approved for independent study if his/her cumulative GPA is less than 2.00 or if he/she has failed or withdrawn failing from the course in question.
- 4. A student will not be allowed to take more than two courses as independent study during the entire time in a curriculum. Exceptions require special approval from the division dean.
- 5. All independent studies must be taught/given by a full-time instructor.

PROFICIENCY EXAMS

A student may request permission to take a proficiency examination in certain courses provided the student has been approved for admission or is officially enrolled in the course. The student must complete a proficiency examination request prior to the end of the tenth class day of the quarter. A \$10.00 nonrefundable charge is assessed for each proficiency examination. Information on proficiency examinations can be obtained from the office of the appropriate division dean and the current student handbook.

STUDENT CONDUCT AND RESPONSIBILITIES DISMISSAL AND SUSPENSION

The following regulations govern student dismissal from class or from the Institute. The act of enrollment at Forsyth Technical Institute includes an acceptance by the student of the rules of the Institute. By enrolling, the student accepts the obligation to assist in making the Institute an effective place to conduct a learning process and to engage in the pursuit of truth, the development of self, and the improvement of society. Each enrolled student is considered to be a responsible adult, and the Institute assumes and requires that men and women of suitable age who enroll in the various programs will maintain standards of conduct appropriate to the status of students at the Institute. The Institute has a responsibility to maintain order on its campus. Therefore, students will be suspended or dismissed for behavior deemed incompatible with the mission, the regulation or the responsibilities of the Institute, or deemed to be in violation of any of the provisions of the Code of Conduct. The Code of Conduct is in the current **Student Handbook** under Student Code and Responsibilities.

The Institute recognizes the right of an enrolled student to receive a full opportunity to learn and develop. The rights of the student are stated in the current **Student Handbook** under the Student Code and Responsibilities. The Institute guarantees the protection of these rights.

Instructional Areas — Any instructor may request a student to leave his class, laboratory, shop, or clinical area when, in the opinion of the instructor, the student's conduct or personal demeanor disrupts normal classroom activities. The instructor, identifying the student and the cause for dismissal from class, will immediately notify his division dean and the Dean of Admissions and Counseling of actions taken. If the student refuses to leave the class, the instructor may call campus security for assistance

The burden of requesting reentry to class, laboratory, shop, or clinical area shall be upon the student involved. Request for reentry must be made to the instructor before the next class meeting. If the instructor decides that the student needs additional counseling before reentry, the instructor must require the student to meet with the division dean or the Student Services counseling staff for further discussion. If the division dean or the Student Services counseling staff decides that the student should temporarily or permanently be dismissed from the class or from the Institute, the instructor will send a written report (approved by the division dean) to the Executive Vice President for Instructional Affairs. The Executive Vice President for Instructional Affairs will make the decision on dismissal when applicable and dismiss the student. The student will be given a copy of the report; if he/she wishes to appeal the decision, he/she must do so by writing the Student Appeals Committee within twenty-four (24) hours after receiving the dismissal notice.

Noninstructional Areas — Any employee or student may file a written complaint for disciplinary action against any student enrolled at the Institute. The complaint must be filed with the Vice President for Student Services who will promptly investigate the complaint and make a decision regarding temporary suspension, dismissal, or other

disciplinary action. Both the complainant and the student involved will be notified. If the student wishes to appeal the decision of the Vice President for Student Services, he/she must do so by writing to the Student Appeals Committee within twenty-four (24) hours after receiving the notice of the decision.

STUDENT APPEALS COMMITTEE

The Student Appeals Committee will hear the appeal of any student after the appeal process has been exhausted at the departmental and divisional level for instructional areas or the Vice President level for non-instructional areas. The Student Appeals Committee will hear the appeal of any student regarding the following:

- 1. Discipline;
- 2. Dismissal, except for academic standing;
- 3. Admissions:
- 4. Residency;
- 5. Discriminatory practices.

The appeal will be heard under the following conditions within two working days of receipt of the confirmed appeal:

- The student must submit a written statement containing factual and valid reasons for the appeal to the Dean of Admissions and Counseling, who shall forward the statement of appeal to the committee chairperson. The chairperson may return the appeal to the student for clarification, or he/she may reject the appeal if factual information or reasons for appeal are not stated.
- The committee will confine itself to making a recommendation on the appeal question and not on the validity of existing policies of the Institute. The committee reserves the right to suggest to the President that a current policy be examined for continued value to the Institute.
- 3. The committee will submit its recommendation to the Vice President for Student Services, who will make a recommendation to the President for a final decision and who will notify the parties involved. If the Vice President for Student Services has already made a decision, the committee will make its recommendation directly to the President.
- 4. In matters core rning residency classification, the committee's recommendation will be sent as the Vice President for Student Services, who will notify the parties involved of his decision. The next step in the appeal process is to the State Residence Committee.
- Records of the proceedings of the Institute Student Appeals Committee are available upon written request to the Dean of Admissions and Counseling for Student Services.
- 6. The student must obtain special permission from the Executive Vice President for Instructional Affairs to attend classes pending resolution of the case on appeal.

The operating procedures of the Student Appeals Committe are available in the Dean of Admissions and Counseling office in Student Services.

STUDENT DRESS CODE

Forsyth Technical Institute frequently has prospective employers and other visitors on campus. In addition, many companies seeking to relocate or open new industries will have representatives visiting this campus.

Therefore, students are encouraged to dress neatly and cleanly. Each instructor has the right to ask a student to leave his class, shop, or clinical experience area if the student's personal appearance or attire is objectionable to the other students or if this attire can be construed as hazardous to safe operations.

PARKING REGULATIONS

Visitors are welcome on the campus of Forsyth Technical Institute. Designated visitor parking areas will be indicated by campus signs. Any visitor receiving a ticket should return it to the person or office visited.

Students planning to park on campus are required to purchase a parking decal at the time of registration. Specific rules governing parking will be issued upon vehicle registration and may be found in the current issue of the **Student Handbook**.

USE OF FACILITIES

The buildings and their contents exist solely for the education of our adult population. The use of the facilities for any other purpose is strictly prohibited. Any use of these facilities for personal gain will result in immediate disciplinary action.

Smoking is prohibited in all classrooms, laboratories, and shops.

Animals are prohibited inside the buildings. Any animal on the campus grounds must be on a leash in compliance with the City of Winston-Salem Leash Law Ordinance Section 3-18.

Children are not allowed in classrooms or shop areas during class sessions, nor may they be left unattended in the library, canteen areas, or on campus grounds.

COMMENCEMENT EXERCISES

Commencement exercises are held at the end of spring and summer quarters on the dates published in the academic calendar. Degrees and diplomas are awarded at this time. Students are expected to notify the Registrar's Office as to their intention to participate in the exercises.

COMMENCEMENT MARSHALS

Marshals are selected from full-time rising sophomores who have maintained the highest scholastic averages during their freshman year. The two marshals who have the highest academic averages are named chief marshals.

SCHOOL RINGS AND PINS

Any student in good standing who has completed at least one-half of the credit hours required for graduation in his/her curriculum may order the official school ring. The student is required to pay a deposit at the time the ring is ordered, with the balance due upon delivery.

Pins for health programs are also available. Orders for both pins and rings may be placed through the Institute's bookstore.



TUITION AND FEES TUITION

The Institute receives funds from local, state, and federal sources. Tuition charges are set by the State Board of Community Colleges and are subject to change without notice.

Tuition:

12 quarter hours or more
Less than 12 quarter hours \$3.25 per quarter hour
Late registration fee\$5.00

STUDENT ACTIVITY FEE

It is the policy of this institution that a student activity fee be charged. The activity fee for curriculum students will be collected during each quarter's registration according to the following schedule:

12 or more credit hours\$5.0	0
6 to 11 credit hours	
less than 6 credit hours\$1.0	0

The use of such a student fee is at the discretion of the Board of Trustees upon recommendation of the President. In general, these fees are used for student-centered activities and for the general benefit of the student body. Student activity fees are not refundable for any reason.

BOOKS AND SUPPLIES

Textbooks and supplies are not furnished by the Institute but are the responsibility of the student and may be purchased at the Institute's bookstore. The cost of books and supplies varies from program to program and from quarter to quarter.

UNIFORMS

Uniforms and other special wearing apparel shall be paid for by the students.

The initial cost of uniforms and special equipment for students in the various health

programs ranges to approximately \$200.00 depending upon the program.

The cost of uniforms and equipment is estimated and subject to change. Students should inquire for details during admission interviews.

TUITION REFUNDS/HOLDS

Tuition is not refundable. Exception will be considered where the cause of withdrawal is completely beyond the student's control, such as serious illness, death in family, and job transfer. In such cases, two-thirds of the tuition paid may be refunded only if the student withdraws and submits a request within ten calendar days after the first day of classes. If a student withdraws from a course or courses, but remains enrolled in the Institute, he will receive no refund for the course dropped unless the Institute is at fault in causing the withdrawal/drop. Refunds of five dollars or less will not be made except for classes cancelled by the Institute.

A student who must withdraw may submit a request that his tuition be held. A request for a tuition hold will be considered when the cause is completely beyond the student's control. If the request is granted, the tuition will be credited to his account so that it may be applied toward costs for any one of the following four quarters.

Fees other than tuition cannot be refunded or held for later quarters. Statements from employers or doctors may be required before requests for refunds or holds are processed.

OTHER FEES

No laboratory, breakage, or property damage fees will be charged to students. However, in case of breakage or damage due to gross negligence or maliciousness, a student will be expected to reimburse the Institute. Academic credit and official transcripts may be withheld until proper payment is made.

HOSPITALIZATION INSURANCE

All full-time students below age 26 are eligible to obtain Blue Cross-Blue Shield Group Insurance at special student rates.

Provisions for this are made through individual contact of the student and Blue Cross-Blue Shield Insurance Company.

LIABILITY INSURANCE FOR HEALTH STUDENTS

All health students must purchase liability insurance before they will be permitted to enter the hospitals for clinical practice. The cost of the insurance may range from \$11.00 to \$30.00 depending on the insurance carrier and must be purchased at the beginning of the fall quarter or the quarter a student enters or reenters a health program.





STUDENT FINANCIAL SERVICES

Financial aid provides financial assistance to students who would otherwise be unable to continue their education. The financial need of a student is determined by the resources available to the student in relation to educational expenses.

Students applying for financial aid should complete and mail the American College Testing Program Family Financial Statement (F.F.S.) to the appropriate address. This form should be completed no later than May 1 preceding the academic year for which aid is requested. As financial aid awards are for only one academic year, students must reapply each year. Requests after May 1 will be processed as long as funds are available.

To be eligible for financial assistance, a student must be enrolled or accepted for enrollment and demonstrate a need for financial aid. Financial assistance is available in a variety of forms to help students who are eligible. Scholarships, loans, grants, and workstudy may be used singly or in combination to meet a student's total need.

Financial aid brochures containing more detailed information are available in the Office of Student Financial Services.

NOTE: In order to continue participation in any of the following financial aid programs, a student must be enrolled at least halftime and maintain satisfactory progress, and have a 2.00 cumulative GPA. Students who do not have a 2.00 cumulative GPA at the end of a quarter are placed on financial aid probation. Students in this category may receive financial aid for the next quarter but must complete that quarter with a cumulative GPA of 2.00 or must have completed a full-time course load (12 quarter hours) during the probation quarter with a 2.00 quarterly average. If a student on financial aid probation does not earn the required GPA, he/she is considered to be making unsatisfactory progress and is placed on financial aid suspension. Financial aid suspension is termination of all financial aid. When a student's work meets the required 2.00 cumulative GPA, financial aid may be reinstated and his/her name will be removed from probation.

GRANTS

PELL Grants

The PELL Grant program is a Federal Aid Program designed to provide financial assistance to those who need it to attend post-high school educational institutions. It was formerly referred to as the BEOG or Basic Education Opportunity Grant. The one-year awards normally range between \$200 and \$838. Students may apply by completing the ACT Family Financial Statement or the Application for Federal Student Aid. Applications may be obtained at the Office of Student Financial Services. Students should allow six weeks for processing.

Supplemental Educational Opportunity Grant

The Supplemental Educational Opportunity Grant (SEOG) is funded by the federal government and is for students of exceptional financial need who, without a grant, would be unable to continue their education.

North Carolina Student Incentive Grant

The North Carolina Student Incentive Grant (NCSIG) is designed for students of exceptional financial need who are North Carolina residents. Students applying for the NCSIG must do so before March 15.

COLLEGE WORKSTUDY

Workstudy is a federally supported program through which students, primarily from low income families, are given preference for part-time employment (up to 20 hours per week). Students must be enrolled at least halftime to apply for workstudy and maintain a 2.00 cumulative grade point average.

LOANS

The Office of Student Financial Services maintains a file on sources of financial aid for students. Loans at a low rate of interest are available through the following agencies:

James E. and Mary Z. Bryan Foundation

North Carolina Insured Student Loan Program

North Carolina Department of Human Resources - Nursing Loan

North Carolina Funds for Vocational and Technical Students

Sloan S. Sherrill Nursing Loan Fund

Taylor Student Nurse Loan*

Winston-Salem Foundation*

Winston-Salem Hospitals Consortium Nursing Student Loan Fund

*Available to Forsyth County residents only.

North Carolina Insured Student Loan Program

Legal residents of North Carolina, who have been accepted for enrollment or are enrolled in good standing and maintain satisfactory progress, may borrow up to \$2,500 or one-half the estimated cost of education per year through College Foundation, Inc. Loans are insured by the State Education Assistance Authority and the United States Office of Education pays the 9 percent interest during the in-school and grace periods. Application must be made through the Institute's Office of Student Financial Services.

North Carolina Department of Human Resources Educational Loan for Second Year Associate Degree Nursing Students

North Carolina residents who are entering their second year of Associate Degree Nursing may apply for a \$1,500 nursing loan. The loan is repaid by service in an approved medically underserved area of North Carolina. Interested students should contact the Office of Student Financial Services in November 1983 to apply for the 1984-85 academic year and in November 1984 for the 1985-86 academic year.

Sloan S. Sherrill Nursing Loan Fund

The Sherrill Nursing Loan is an interest-free loan made through Forsyth Technical Institute for second-year Associate Degree Nursing students. For more information and applications, students should contact the Office of Student Financial Services by May preceding the academic year for which a loan is requested.

Winston-Salem Hospitals Consortium Nursing Student Loan Fund

Associate Degree Nursing students entering their third quarter may apply for a \$1,500 nursing loan. The loan is repaid by service in one of the four hospitals in Winston-Salem. Interested students should contact the Office of Student Financial Services.

SCHOLARSHIPS

The RJR Archer Scholarship is awarded annually to an outstanding student entering the second year of Manufacturing Engineering Technology and Electronics Engineering Technology.

The R. D. Boyer Scholarship Fund is awarded annually, based on financial need, to a student pursuing a career in construction occupations.

The Bobby F. Cheek Honorary Scholarship is presented by the Pfafftown Jaycettes for a Forsyth County resident. The awarding of this scholarship is not controlled by the Institute.

The Data Processing Management Association Scholarship is awarded annually to an outstanding student entering the second year of Electronic Data Processing.

The Mary Kate Dixon Horticultural Scholarship is awarded annually to an outstanding student entering the second year of Ornamental Horticulture.

The Norman Gaddis Scholarship is sponsored by the Student Government Association. It is primarily an emergency scholarship for students eligible for financial aid when funds are not available from other sources.

The Integon Scholarship is awarded annually to a deserving second-year Executive Secretarial Science student and is based on need, academics, and good citizenship.

The Sandra Johnson Memorial Scholarship is awarded annually to an outstanding student entering the second year of Executive Secretarial Science.

The Marshall Paul Johnston Scholarship is a perpetual scholarship available to Automotive Mechanics students.

The Winston-Salem Kiwanis and the Twin City Kiwanis Clubs award scholarships to seniors graduating from Forsyth County schools each year. The awarding of these scholarships is not controlled by the Institute.

The Mary B. Lauerman Memorial Scholarship is awarded annually to an outstanding student entering the second year of Associate Degree Nursing.

The L. Carroll Lennon Scholarship Fund is donated by Read's Uniform Center, Inc. The award is given each year to a first and second year Associate Degree Nursing student and a Practical Nurse Education student. Recipients for this award are referred by the Office of Student Financial Services.

The McPhail Scholarship fund is sponsored by the Pilot Club of Winston-Salem. This need based scholarship is awarded annually to an Associate Degree Nursing student.

The Jane Gaither Murray Scholarship is awarded annually to a deserving student entering the Associate Degree Nursing curriculum.

The North Carolina Society of the American Association of Respiratory Therapy Incorporated Scholarship is awarded annually to one student in North Carolina entering the second year of Respiratory Therapy. Students who wish to apply should contact the department chairperson of Respiratory Therapy.

The Lynne Breedlove O'Rourke Memorial Scholarship is awarded annually to an outstanding student entering the second year of Radiologic Technology.

The Henry F. Snyder Scholarship is used primarily as an emergency scholarship for students eligible for financial aid when funds are not available from other sources.

The Wachovia Technical Scholarship is awarded annually to two students who are enrolled full time in the second year of a technical curriculum and is based on need and scholastic promise.

Other than the scholarships listed above, there are various individuals and organizations who contribute money yearly for scholarships for needy students. Most of the money available is not restricted; however, some of the scholarships are restricted to individuals enrolled in specific programs.

OTHER SOURCES OF AID

Other sources of aid not administered by the Institute are available for eligible students. Interested students should apply with the appropriate agency. The Office of Student Financial Services can assist the students in making the initial contact with the sources listed below:

Social Security Benefits
North Carolina Veterans Affairs Scholarships
North Carolina Vocational Rehabilitation
North Carolina National Guard Tuition Assistance Plan
Job Training Partnership Act (JTPA)
Dependency and Indemnity Compensation (VA)



VETERANS' BENEFITS

The Institute is approved for the training of persons eligible for benefits administered by the Veterans Administration (VA).

The Admissions Office will help applicants select a program of study and explain the procedures for enrolling in the Institute. All admission requirements must be completed before veterans' paperwork can be started. Admissions will require application forms, testing, and the receipt and evaluation of transcripts for all prior training.

Once the admissions procedures are completed, the eligible person should contact the Office of Student Financial Services to begin benefits processing. The actual enrollment certification and related documents will not be submitted to the VA Regional Office until the new student registers for classes.

Hours of Pay

Veterans' benefit payments are issued monthly and are based on training for a prescribed number of hours.

Enrollees in two-year technical programs are classified according to the number of credit hours per quarter.

Full-time	or more credit hours
3/4 time	9-11 credit hours
1/2 time	6-8 credit hours

Enrollees in one year vocational programs are classified according to the number of weekly contact hours per quarter:

Full time	 a minimum	of 22	contact hours
3/4 time	 a minimum	of 16	contact hours
1/2 time	 a minimum	of 11	contact hours

Standards of Progress

Federal regulations require that students receiving veterans' benefits must maintain standards of academic progress and conduct.

Satisfactory Academic Progress

The Academic Standing section of this catalog describes the basic academic requirements for all students. A 2.00 cumulative grade point average must be maintained and a probationary period of not more than one quarter is permitted. Progress is reviewed on a quarterly basis and performance in the major subject areas and preparatory/refresher classes are considered as well.

If a veteran or eligible person is classified as making unsatisfactory progress, a report will be submitted to the Veterans Administration and benefits will be terminated. Termination will take place effective with the posting of grades at the end of the probationary quarter. Recertification will not be made until satisfactory progress has been established by the veteran regaining a 2.00 cumulative grade point average.

Students must request recertification in writing to the Director of Student Financial Services following the quarter in which satisfactory progress has been reached.

Exceptions to this policy on termination of benefits may be made if there are unusual circumstances related to unsatisfactory progress and if continuation is recommended by the Director of Student Financial Services after consultation with the veteran.

Satisfactory Conduct

Conduct in accordance with the section on Student Conduct and Responsibilities is expected of all students. Dismissal of veterans or eligible persons for unsatisfactory conduct will be reported to the Veterans Administration and benefits will be terminated.

Satisfactory Attendance

All students are expected to maintain satisfactory attendance as defined in the section on Attendance. Eligible persons dropped from classes for nonattendance, poor attendance, or those who withdraw, will be terminated or have their hours reduced effective with the last day present in class. Unless special circumstances are involved, the Veterans Administration may determine this termination or reduction to be an overpayment retroactive to the beginning of the quarter.

Complete withdrawals for two consecutive quarters will be considered unsatisfactory attendance resulting in benefits being terminated. Benefits can be reinstated by satisfactorily attending a complete quarter without certification. Certification will be done retroactively for this quarter upon veteran's request.

Exception to the requirement of a veteran attending a quarter without certification will be granted only when the veteran has provided a written statement of mitigating circumstances to the Director of Student Financial Services.

Punitive/Nonpunitive Grades

Federal regulations prohibit payment for grades that do not count as progress toward graduation. Audits are not payable. A grade of "WF" is punitive because it counts as an "F" in grade point average computations. A grade of "W" or "WP" is nonpunitive. If an eligible person receives a grade which reduces his/her training time, a report is submitted to the Veterans Administration. In the case of punitive grades, the effective date of adjustment is the last day present in class. In the case of nonpunitive grades, the effective dates of adjustment will be an overpayment retroactive to the beginning of the quarter, unless special circumstances are involved.

Counseling Services and Other Information

Students may contact the Office of Student Financial Services concerning availability of counseling services or come directly to the Counseling Center in the Office of Student Services.

Questions concerning standards of progress/conduct should be directed to the Office of Student Financial Services.

Questions concerning eligibility, enrollment, curriculum changes, withdrawals, attendance, pay problems, or information in general should be directed to the Office of Student Financial Services.

There is a veterans information booklet available which contains more detailed information concerning the various requirements for receipt of benefit payments.



ORGANIZATIONS AND ACTIVITIES STUDENT GOVERNMENT ASSOCIATION

The Student Government Association serves to promote interest in student affairs both on and off campus. The association is composed of all students who pay the student activity fee. Representatives are elected from each instructional division to serve on the Executive Council. Representatives to the Executive Council elect the Student Government Association officers from within the Executive Council. Faculty or staff members are appointed by the administration to serve in an advisory capacity to the Student Government Association. The selection of representatives is subject to change to better meet the entire student body's needs.



STUDENT REPRESENTATION ON BOARD AND COMMITTEES

The President of the Student Government Association is a nonvoting member of the Board of Trustees of the Institute. Student representatives also serve on the Student Appeals Committee, the Graduation Committee, and other committees concerned with students.

CIRCLE K

Circle K is a national collegiate service club sponsored by Kiwanis International. The club is open to all interested students.

SOCIETY OF ENGINEERING TECHNOLOGY STUDENTS

The Society of Engineering Technology Students is a service and social club open to students from the Manufacturing Engineering Technology and Mechanical Drafting and Design Technology programs. This club has raised and set aside funds for endowing a scholarship open to second quarter students in these two fields of technology.

LAW ENFORCEMENT ADMINISTRATION SOCIETY (LEAS)

Membership in LEAS is open to any student who is, or has been, enrolled in a course of study in the administration of criminal justice.

The objectives of the organization are to promote public understanding of the problems and objectives in the administration of criminal justice and to elevate the standards of and foster greater understanding between the agencies and departments in all areas of the administration of criminal justice.

OTHER ORGANIZATIONS

Students are encouraged to affiliate with student chapters of various professional and technical organizations and societies.

ATHLETICS

The Institute does not offer a formal, organized athletic program. The students themselves have organized basketball, softball, and bowling teams and compete in Winston-Salem city leagues in these sports. Volunteers from the faculty serve as sponsors and coaches of the teams.

STUDENT PUBLICATIONS

Students are encouraged to participate actively in the preparation of the FTI **Reporter** and **Reflector**, the two major student publications.

The FTI **Reporter** is the student newspaper written, edited, and managed by the student staff with the assistance of a faculty advisor.

The **Reflector**, the yearbook of the Institute, is written, edited, and managed by the student yearbook staff with the assistance of a faculty advisor.

STUDENT SERVICES GUIDANCE AND COUNSELING SERVICE

Counseling Center

The Office of Student Services maintains a staff of professional counselors whose services are available to students needing help with educational, vocational, financial, social, or personal problems from the time they enter school until they leave. Assistance is provided to facilitate wise choices, decisions, and adjustments associated with being a student. The counselors also serve as consultants to faculty and staff in helping to meet the educational needs of students. The counselors are available to both day and evening students in the Counseling Center and during the day at the Allied Health Building.

Several individualized tests and inventories are available for counseling purposes, and students are referred to appropriate community agencies or resource persons when it is apparent that they can be assisted more effectively in this manner.

Career Guidance Center

The services of the Career Guidance Center are available to applicants and students of Forsyth Technical Institute and to other members of the community who need assistance with career planning. Emphasis is placed on activities such as developing and teaching career planning, career counseling, development of decision-making skills, maintenance of a useful career information library, and providing microfiche cataloging and computer information on the Employment Security Commission job bank.



Job Placement Office

The Job Placement Office is another important part of the guidance and counseling services provided for students. This office exists to assist graduates as well as current students in finding suitable employment. The office maintains and posts current job openings available in the local area. The Job Placement Office also provides assistance in the preparation of resumes and cover letters, as well as workshops on such topics as interviewing and the job search process.

AUXILIARY STUDENT SERVICES

Housing

Since the Institute has no dormitory facilities, students who wish to live away from home must make their own housing arrangements. The Institute takes no responsibility for locating or supervising student housing; however, suggestions as to location of off-campus housing may be obtained in the Office of Student Services.

Health Services

Limited health services are provided through the Office of Student Services and first-aid supplies are located in shop areas; however, injuries requiring more than minor first-aid will be treated in the emergency room of either Forsyth Memorial Hospital or North Carolina Baptist Hospital.

For major illness or injury, ambulance transportation is available to either of the two hospitals, both of which are located within two miles of the Institute.

Accident Insurance

Accident insurance covering the hours a student is in school, on field trips, or participating in student activities, is provided to all full-time and part-time curriculum students. This student insurance is furnished by the Institute as a service to students, but it is not meant to replace a student's personal coverage.

Food Service

Canteen service is available in the student center which is located on the ground level of Snyder Hall. A variety of food and drink is available.

Canteen service is available in both the student lounge in the Allied Health Building and the student lounge in the Paramedical Building at Forsyth Memorial Hospital.

Student Centers

A large, attractive student center is located on the ground level of Snyder Hall. Students are encouraged to use the center as a place in which to meet, talk, eat, and relax. A study lounge is also available next to the bookstore for a quiet place to study.

Student lounges are available to students in the health programs in the Allied Health Building and in the Paramedical Building at Forsyth Memorial Hospital.

Lost and found Service

Lost and Found articles will be handled at the reception desk in the Parkway Building on the main campus, the counselor's office at the Allied Health Building, and the department chairperson's office at Forsyth Memorial Hospital.

BOOKSTORE

A school bookstore is operated by the Institute as a service to students, faculty, and staff. Textbooks, school supplies, and course-related materials, as well as other items of special interest to students, are offered for sale. The bookstore is adjacent to the student center in Snyder Hall and is open Monday through Friday from 9:00 a.m. until 3:00 p.m. and on Monday, Tuesday, and Thursday evenings from 6:00 p.m. until 8:00 p.m.

Summer quarter evening hours will be posted at the bookstore.

LIBRARIES

The three libraries contain approximately 30,750 books and audiovisual software. Accompanying audiovisual hardware is available for use in the libraries and classrooms.



Main Campus

Students have access to the library in the Administration Building which is open Monday through Thursday from 8 a.m. until 9 p.m. and on Friday from 8 a.m. until 4:30 p.m.

Although no fines are charged, students are responsible for replacing books that are lost or damaged. Until replacement is made, library privileges will be revoked, students will not be permitted to register, and students' records will be sealed.

Forsyth Memorial Hospital

Students have access to the library in the Forsyth Memorial Hospital Paramedical Building which is open from 8 a.m. to 5 p.m. Monday through Friday.

Allied Health Building

Students have access to the library on the first floor of the Allied Health Building. It is open Monday through Thursday from 8 a.m. to 8 p.m. and on Friday from 8 a.m. to 5 p.m.

For all libraries, library cards are given to new students during library orientation. Should cards be lost, there is a \$3.00 replacement fee. Each student is responsible for materials checked out on his/her card. Replacement fines are imposed on regular books; and, there is a 25-cents-an-hour fine (up to the cost of the book) on reserved books checked out overnight and due in one hour after the library opens.

The student is responsible for replacing books that are lost or damaged. Until such replacement is made, library privileges may be revoked and transcripts will be withheld.

INDIVIDUALIZED LEARNING CENTER

The Individualized Learning Center (ILC) specializes in helping students prepare for the GED, the high school equivalency diploma, and the Comparative Guidance and Placement Test, the Forsyth Technical Institute entrance examination. Within the center candidates can take diagnostic tests to determine their strengths and weaknesses in mathematics, reading, and English; study through a self-paced, individualized program; and take the actual test when ready. Additional services include curriculum credit courses, adult enrichment study, English as a Second Language, make-up testing for classroom courses, and supplemental work for various curriculum courses. Students in the learning center use programmed, self-instructional books and audiovisual materials and have access to a coordinator for personal help. Experience has shown that motivated, self-disciplined adults learn well when using this approach.

An Apple II + microcomputer is available in the center to provide training in the area of microcomputers and to provide access to computer-assisted instruction.

In addition to the learning center on campus, there are off-campus centers located in the Main Public Library on Fifth Street, Paddison Library in Kernersville, and in the Whitaker Rehabilitation Unit of Forsyth Memorial Hospital. Services in all learning centers are free with the exception of the credit courses offered in the campus center for which students must register and pay at the beginning of a quarter. Students, except for those taking the credit courses, may enroll at any time.



Tutoring Services

Tutoring services provide assistance to Forsyth Technical Institute students who are experiencing academic difficulties. The main function of these services is to arrange one-to-one and group tutoring sessions. Selecting and training effective tutors, supplementing course materials with programmed instruction, and offering academic advising complete the functions of tutoring services.

Tutors are recruited initially from the student body. In those content areas where the demand for tutors cannot be met on campus, other qualified persons are considered for tutor positions. The institution provides funding for tutor salaries without cost to the students who request tutorial assistance.

Curriculum Credit Courses

To enroll in a curriculum course in the ILC, a student must initiate a request for permission through his/her advisor. A student must register for the course during the regular registration period and pay the regular curriculum tuition charges. A student should be cautioned about the measure of self-discipline necessary for achievement in this setting. The ILC attendance policies and course requirements are as rigorous as those in the classroom.

The request for permission form is originated with the Coordinator for Credit Courses in the ILC and must be signed by the advisor, the division dean, and the registrar. The form is turned in to the registrar upon registration for the course.

The following courses are offered for curriculum credit in the ILC:

Medical Terminology I Medical Terminology II Business Mathematics

Filing

Principles of Supervision Individualized English Reading Improvement English Basic Reading Skills

English Basic Reading Skills III Geometry

Basic Arithmetic Skills Prebusiness Math Algebra (Pre-Technical) Pre-Technical Math

Math for Health Education Fundamental Concepts of Math

Fundamentals of Math

Algebra

High School Equivalency

Adult residents of North Carolina who have not completed high school may earn a high school diploma equivalency by passing a battery of five tests. These tests are known as either the high school diploma equivalency test or test of General Educational Development.

The GED program is designed primarily for adults 18 years or older; however, 16 and 17 year olds are allowed to take the test if they meet certain conditions. It is the policy of Forsyth Technical Institute to encourage young people to complete traditional public or private high school before seeking admission. Current residency in North Carolina is required.

A high school diploma equivalency is recognized across the nation by most employers and educational institutions and is issued by the North Carolina Department of Community Colleges. Forsyth Technical Institute is one of 71 official GED testing centers in the state and is the only one in Forsyth County.

Persons interested in further information or in taking the GED test should contact the Institute's Individualized Learning Center. The center administers the test by appointment. There is a \$5.00 fee for taking the GED test.





ADULT CONTINUING EDUCATION

ADULT CONTINUING EDUCATION

The Adult Continuing Education Division of Forsyth Technical Institute provides appropriate, economical, and convenient learning opportunities for those citizens who are 18 years or older. The opportunities are based on individual need and previous educational achievement. They range from the first grade through high school and extend into vocational, technical, and general adult continuing education. Training is available to all of suitable age who wish to learn and can benefit from the instruction provided.

The Continuing Education Division provides a balanced educational program that encompasses a wide variety of course offerings that will meet the educational needs of employed and unemployed adults. The specific areas include Adult Basic Education, High School Diploma Program, Occupational Extension, New and Expanding Industry, Management Development Training, Academic, Avocational, and Practical Skills. New programs and/or courses are periodically developed when needs become apparent.

The primary goal of the Adult Continuing Education Division is to provide quality adult continuing education courses in convenient locations at a low cost for the citizens of Forsyth and Stokes counties.

The general program objectives are:

- 1. To provide expanded educational opportunities for those adults who would not otherwise continue their education.
- 2. To provide relatively inexpensive, nearby educational opportunities for high school graduates, school dropouts, and adults.
- 3. To provide programs of vocational/technical education for employed and unemployed adults who need training or retraining.
- 4. To provide short courses that will meet the general adult and community service needs of the people in the community.
- 5. To provide requested vocational and technical training programs for new and expanding industry in the Forsyth Technical Institute service area.

GENERAL INFORMATION

Adult Continuing Education courses are scheduled quarterly. Preregistration is required for all courses and programs. Preregistration can be accomplished by calling or coming by the Adult Continuing Education Office. Official registration takes place at the first class meeting. Registration is completed by filling the necessary registration forms and paying the required fee. The Registrar's office keeps an official record of achievement for each student enrolled in Adult Continuing Education. Approximately 35 percent of the courses are taught on the Forsyth Technical Institute's campus. The remainder are taught in various locations in the community. Many courses meet during the day; however, approximately 90 percent of courses meet during the evening hours and Saturday morning.



ADMISSIONS REQUIREMENTS

All persons who take Adult Continuing Education courses must be eighteen (18) years or older. However, selected high school juniors and seniors may enroll provided they have approval from their high school principal and Forsyth Technical Institute's Admissions Office. Enrollees should have completed the tenth grade in order to take courses other than Adult Basic Education and Adult High School courses.

COST

A registration fee is required for all Adult Continuing Education courses except the Adult Basic Education and Adult High School programs. Some courses have additional supply fee charges. Volunteer firemen, fire department personnel, volunteer rescue and lifesaving department personnel, local law enforcement officers, and persons sixty-five (65) or older are exempt from paying the registration fees.

CEU CREDITS

Most Adult Continuing Education courses that meet for ten or more contact hours are approved for Continuing Education Units. C.E.U. credit is based upon the number of hours a course is scheduled to meet. One C.E.U. is awarded for every ten hours a person attends class and any portion thereof. (For example, a course that meets for 22 hours awards 2.2 C.E.U.'s.) Persons who complete the Management Development Training Program receive a diploma. A high school diploma is awarded to those persons who successfully complete the Adult High School Diploma Program.

OCCUPATIONAL EXTENSION PROGRAMS

The Occupational Extension programs and courses are designed to provide an opportunity for working adults to gain or to improve vocational/technical skills. The programs also serve the business and industrial community by upgrading the skills of employees.

The Occupational Extension Programs include:

- 1. **Management Development Training** is designed to train or upgrade supervisors, potential supervisors, small business owners, and management trainees in business and industry.
- 2. **Vocational/Technical Courses** are designed to upgrade skills and knowledge in certain occupational and technical areas. These courses also provide many adults with an opportunity to gain new skills.
- 3. **Fire Service Training** is designed to provide practical training in all areas of fire fighting, to assist new volunteer fire departments in training personnel, and to provide upgrade training for the personnel of existing volunteer fire departments.
- 4. **Seminars and Workshops** are developed for the purpose of providing specialized training for particular groups.
- 5. Law Enforcement Training is designed to train personnel in basic law enforcement and to provide upgrade training for persons who are currently employed in the profession.
- 6. **New and Expanding Industry Training** is designed to train individuals in specific skill areas for jobs created by new or expanding industries.
- 7. **Health Related Training** is designed to provide upgrade training to persons who are employed in health professions and prepare persons to become employed in the health related areas.



MANAGEMENT DEVELOPMENT TRAINING

Management Development Training (MDT) is an educational program designed to upgrade the competency of supervisory and mid-management personnel in business and industry. Classes are scheduled in accordance with the needs of industry.

Supervisors or potential supervisors may qualify for an MDT Diploma by completing sixteen (16) courses. For supervisors pursuing the MDT Diploma, it is suggested that this program be planned to cover a two-year period. Most of the courses are taught during evening hours and occasionally on Saturday mornings.

Applicants for this program should presently be a supervisor or have ambitions to become a supervisor. There are no prerequisites for entry into the program. There are four required courses and most courses are scheduled to meet one night per week for eleven (11) weeks.

Listed below are course descriptions for some of the more popular Management Development training courses:

Art of Motivating and Leading People — Emphasis is placed on specific problems in the area of motivation. The course should provide self-evaluation for those attempting to motivate others. This course is also designed to acquaint people with some of the techniques of leadership and to develop in them some understanding and appreciation of human behavior and how employees develop attitudes about their jobs, their employers, and their supervisors.

Conference Leadership — This course is designed to train supervisors in the techniques and procedures of managing a group of people solving their collective and individual problems.

Introduction to Data Processing — This course is designed to introduce the student to basic terminology, concepts, and principles of business data processing and programming. Emphasis will be placed on basic ideas the student should master in preparation for learning a programming language.

Principles of Management — This course involves the definition, function, history, purpose, and scope of management. Also covered in the class will be schools of thought in administration and management, the management process (planning, organizing, staffing, directing, controlling, coordinating, and decision making), tools of administration (authority and communication), and administrative responsibility.

Principles of Supervision — This course is designed for the person who is in a supervisory capacity. Subjects covered will include: fundamentals of supervision, relationships on the job, communications, training workers, performance evaluation, grievances and discipline, absenteeism, job management, managing time, encouraging self-improvement, human relations, and motivation.

Speed Reading — This course is designed to improve the student's ability to read rapidly and accurately. Special machines are used for class drill to broaden the span of recognition, to increase eye coordination and word group recognition, and to train for comprehension in larger units.

A complete course listing begins on page 75.

VOCATIONAL AND TECHNICAL COURSES

Courses in this program are occupationally oriented, providing adults with the opportunity to upgrade skills and knowledge in certain vocational and technical areas. This program includes upgrade training in such areas as drafting, health occupations, fire service training, and welding. It also gives the regular curriculum graduates of the Institute an opportunity to participate in a continuing education program after entering the world of work.

The following are course descriptions of some of the more popular vocational and technical extension courses:

Arc Welding Processes — A special arc welding course to include shielded metal arc welding (Stick), tungsten inert gas welding (TIG), and metal arc inert gas welding (MIG). **Auto Body Repair I** — This course is an introduction to the history of automobile construction, body repair, hand tools, molding fasteners, and minor sheet metal repair procedures. No prerequisites.

Auto Tune-Up — This is a course designed for the car owner who would like to be able to perform a minor engine tune-up without having to invest a lot of money for testing equipment. This course will cover basic fundamentals of engine operation with emphasis placed on items such as distributors, ignition timing, carburetors, and many smaller items that assure a good engine tune-up.

Electronics, **Electrical Fundamentals**, **Level I** — This course will define basic units, volts, amperes, ohms, etc. It will investigate mathematical relationships as applied to electrical units. Ohm's law will be thoroughly covered. Electromagnetics and the operation of relays, motors, and generators (both AC and DC) will be discussed. Students will be introduced to electron theory and briefly how electron tubes and solid state devices operate. Students will be shown how to use basic electrical/electronics measurement devices. No prerequisites.



Digital Basics for Electronic Servicing I — This course will cover the type of components used extensively in control circuits and computer applications. It will start with the basics of binary numbers and progress through the development and application of microprocessors. The complete course will consist of two quarters. Prerequisite: A good working knowledge of solid state components or one year of electronic schooling. Machine Shop Practices I — Basic machine shop practices will include the following: introduction to machine tools (drill press, lathe, milling machine, shaper, grinders, etc.), care and use of basic hand tools and measuring instruments, elementary layout and processes on lathe, drill press, and off-hand grinding of tools. Safety glasses required. Major Home Appliance Repair I — This course is designed to familiarize persons with the proper operation of refrigerators, ranges, dishwashers, washers, and freezers. Students will be trained in troubleshooting techniques and repair which will involve the use of meters and circuit diagrams for each of the appliances mentioned above. Safety glasses required.

Mechanical Drafting & Sketching I — Instruction will include language of drawing, projections (orthographic, isometric, oblique), alphabet of lines, dimensioning and lettering, freehand sketching, and instrument drawing techniques.

Oil and Gas Burner Service — This course covers the following: oil burner fundamentals (operation, control, and service of oil burner systems); installing and servicing electric heating elements and their controls; principles of operating, installing, and servicing hot water and low pressure systems. Safety glasses required.

A complete course listing begins on page 75.

FIRE SERVICE TRAINING

Fire Service Training is designed to provide practical training in areas of fire prevention and fire fighting. Courses are offered primarily to new volunteer fire department personnel. Upgrade training courses are provided for personnel who are already volunteers participating in fire departments and for professional fire fighters who are employed by the City of Winston-Salem. Fire Training Service courses are provided to professional and volunteer firemen free of charge.

Persons interested in further information regarding these courses should call or come by the Adult Continuing Education Office.

SEMINARS AND WORKSHOPS

Seminars and workshops are developed for the purpose of providing specialized training and educational programs for specific groups and organizations. Seminars and workshops have been conducted in the areas of hotel-motel management, energy conservation, cosmetology, occupational safety and health, and visual emission control.

LAW ENFORCEMENT TRAINING

The primary thrust in law enforcement education has been through the Law Enforcement part of entrance level training for public safety officers. In addition, this same training is offered to the Forsyth County Sheriff's Department. This 240 hour course was established by the North Carolina Justice Academy and includes 35 law enforce-

ment topics. It is a mandatory minimum standard for basic police training in North Carolina. It is designed to provide the newly employed law enforcement officer with basic job knowledge, skills, and abilities to perform entry level police work. The material includes constitutional law, the North Carolina Criminal and Motor Vehicle Law, traffic accident investigation and reporting, basic laws of arrest, search and seizure, evidence, patrol operation, firearms, and defensive tactics.

In addition to the 11 weeks of law enforcement, entrance level training for public safety officers includes ten weeks of fire suppression, three weeks of emergency medical, and five weeks of behavioral science.

NEW AND EXPANDING INDUSTRY TRAINING

The Adult Continuing Education Division participates in the creation of more challenging and rewarding jobs for the citizens in our community by providing a customized training service to new or expanding industries. In cooperation with the Industrial Services Division of the Department of Community Colleges, Forsyth Technical Institute will design and administer a special program for training the production manpower required by any new or expanding industry. The purpose of the program is to assist these industries in meeting their immediate manpower needs and in developing long range training programs of their own to satisfy their continuing replacement and retraining needs.

This program includes the following services:

- 1. Consultation in determining job descriptions, defining areas of training, and prescribing appropriate course outlines, training schedules, and materials.
- 2. Selection and training of instructors and providing instructional services for the duration of the training program.
- 3. Provision of suitable space for a temporary training facility (prior to the completion of the new plant) including the installation costs of equipment in the temporary training facility.

HEALTH-RELATED TRAINING PROGRAM

Health-related training is designed to provide upgrade training to persons in the health professions and to assist persons in preparing themselves to become experienced in health-related areas. This training provides the student with entry level job skills.

The courses are designed to upgrade as well as update knowledge and skills in specific areas. Courses are also offered to provide training for professionals who have not practiced in several years, enabling them to reenter their profession with competence.

Listed below are course descriptions for some of the popular Health-related training courses:

Cardiopulmonary Resuscitation (CPR) & Advanced First Aid — This course is designed for those persons who wish to expand their knowledge of first aid such as fire rescue squad and emergency personnel. Upon satisfactory completion of this course, the student will be awarded an American Red Cross Advanced First Aid and Emergency Care Certificate. The student will be certified in CPR by the Amercian Heart Association. Standard First Aid is not a prerequisite for this class.

Emergency Medical Technician (EMT) — The purpose of this course is to prepare professional and volunteer EMT personnel to take the state examination for certification. It is jointly sponsored by Forsyth Technical Institute and the North Carolina Office of Emergency Medical Services. The course is approximately 96 hours in length including both classroom and lab instruction.

Homemaker — **Home Health Aid** — This course provides training in the skills necessary to assist the home-bound individual with personal hygiene, companionship, and provision of a safe and clean environment. The psychological aspects of aging will be a major emphasis throughout the course.

Licensed Practical Nurse (L.P.N.) Refresher — This course is designed to prepare the L.P.N. who has been out of nursing for a number of years to go back to work with the necessary skills. There is a total of 90 classroom hours and 90 clinical training hours. The main areas of instruction will include general medical and surgical nursing, experience with the functions of the L.P.N., and L.P.N.'s relationship to the health team.

Medical Terminology — Students taking this course will acquire a working knowledge of terms encountered in medicine. The course will also orient the student to the use of reference books dealing with medical terminology.

Nursing Assistant — The purpose of this course is to provide those who are genuinely interested in patient care with the opportunity to acquire a basic understanding of the principles involved and to develop skills necessary to assist the nurse in providing safe, efficient, and effective patient care. There is an introduction to basic scientific principles, the structure and function of the human body, and the changes which illness and aging produce. Approximately one-third of the course time is spent working in the hospital. The clinical time gives the student the opportunity to relate to patients and their families, to develop skills in performing nursing procedures, and to become a functioning part of the nursing team.

Registered Nurse (R.N.) Refresher — This course is designed to prepare the R.N. who has been out of nursing for several years to return to work. The course includes general medical and surgical nursing, new equipment, procedures, charting, documentation, medications, I.V. therapy, and physician's orders. Students will be allowed to perform patient care under the direct supervision of the instructor.

Unit Secretary — This course is designed to prepare a person to work as a unit secretary in either a hospital or nursing home. The student is trained to keep and maintain clerical items and up-to-date records of patient procedures in a readable and usable form for doctors and nurses to perform patient treatments. Some of the areas covered include medical and drug terminology, scheduling surgery and special procedures, telephone techniques, receptionist's duties, and the intercom.

Venipuncture Technician — This program is designed to train students to collect lab specimens for analysis. The program consists of two eleven-week sessions of instruction. During the first eleven weeks, the student will receive classroom instruction in anatomy and physiology and human relations. The second eleven-week period provides classroom instruction in principles and practice of specimen collection and medical communication skills. During this session the student will also be involved in clinical training. Upon successful completion of both the classroom and clinical instruction, the student will be awarded an appropriate certificate.

A complete course listing begins on page 75.

AVOCATIONAL AND PRACTICAL SKILLS

The general adult enrichment program is designed to meet the avocational needs of individuals in the community. Individuals have an opportunity to broaden their educational base by taking courses tailored to their personal interest, growth, and development. The various courses are offered during the day and evening hours. Although the courses are avocational in nature, some students find the courses beneficial in their specific occupations.

Listed below are course descriptions for some of the more popular courses:

Acrylic Painting — The students start by using a picture or photograph to paint from, then progress to composing original paintings. Instruction includes how to blend colors, how to obtain depth, and how to soften colors so they are not raw. Still lifes will be arranged for painting; field trips may be scheduled.

Cake Decorating — Emphasis will be placed on decorating equipment and its use. The course will also emphasize the decorating of birthday, anniversary, and special occasion cakes.

Macrame — Basic macrame knots will be learned in constructing knotted projects such as jewelry, plant holders, wall hangings, and articles of clothing such as belts, vests, and other apparel.

Oil Painting — This is an introductory course to oil painting. Included are acquisition of materials, basic understanding through lecture, accomplishment of one complete oil painting, and a realistic study of still life.

Sewing: Clothing Construction I — The student will receive instruction in selecting proper pattern size, fabric selection, and operation of the sewing machine. A garment will be constructed in class. This class is for the beginner.

Upholstery — This course is designed for nonprofessional persons who wish to learn to upholster. Students must bring a small upholstered chair to practice the principles learned in class.

Wallpaper Hanging — This course will make the student aware of the different types, quality, and patterns in wall coverings. It will provide demonstrations and limited practice in removing old wallpaper and preparation for covering and pasting up paper.

A complete course listing begins on page 75.





ACADEMIC PROGRAM

The Academic Extension Program encompasses the areas of the Adult High School Diploma Program and other academic programs.

ACADEMIC COURSES

The Academic Extension Program offers a variety of one quarter terminal courses designed for self-interest and self-development. Classes are usually conducted one day or two evenings per week. These courses offer students an opportunity for self-improvement in cultural and avocational areas.

Calligraphy — The art of italic handwriting will be taught. Included in instruction will be writing tools and materials required, the care of the tools, the proper posture and pen hold necessary, the proper letter strokes, the joining of letters, and pen lifts and spacing.

Financial Management — **Where does your money go?** — This course is designed to aid individuals in identifying all aspects of financial management. Investments, taxes, insurance, living expenses, and credit will also be discussed.

French, Conversational — This course will teach the basics of French so the student may travel and visit comfortably in a French-speaking country. Basic vocabulary and conversation related to hotel, shopping, transportation, directions, and restaurant matters will be stressed. Individual student needs will be considered. Culture will be discussed as it pertains to dealing with the people of the French-speaking countries. Income Tax — This course involves the study and application of the federal and state income tax system. Emphasis will be placed upon gathering the data necessary for preparation of tax forms, i.e. 1040. Actual preparation and deductions will be completed in class.

Managing Your Personal Assets — This course, designed in a seminar format, includes basic information on money, interest rates, various savings and investment vehicles, tax shelters, retirement plans, and estate planning. Students are taught and encouraged to begin the development of a personal financial plan.

Manual Language I — This is a course for hearing people who have a need or desire to communicate or improve their communication with the deaf. Instruction is given in basic manual communications with the deaf including language of signs and finger spelling.

Real Estate Exam Prep., Brokers — This course is designed to prepare applicants for the North Carolina Licensing Exam for Real Estate Salesmen and Brokers. The course will cover real estate fundamentals, law, appraising, brokerage, finance, and closing procedures.

Real Estate Exam Prep., Salesmen — For adults who need to prepare only for the salesmen's portion of the state exam, this course meets two nights each week for six weeks. Persons taking this course MUST have a sponsor in order to take the state exam

Real Estate, Math — This course will stress basic skills in mathematics with practical problem solving exercises directly related to real estate computations. This course is for the students preparing for the North Carolina Real Estate Licensing Exam.

Religion: The Early Christian Church — The purpose of the course is to explore the origins and history of our present-day Christian movements and denominations. The course is intended to answer questions that have arisen as to why and how Christianity is divided into many churches. By attempting to answer these questions, the student can hopefully begin to see the oneness that is in all Christian traditions. Also, such an understanding will no doubt help one to accept the differences among denominations and to appreciate their contributions to religious, societal, and cultural developments. The period covered will be from the First Century A.D. through the Sixteenth Century Protestant Reformation. Students will study culture and history from the standpoints of impact upon personalities and teachings, and in turn, the impact that these personalities and theologies have made upon history, culture, and society.

Wills, Trusts, & Probate — A basic course to help an individual to understand the purpose of a will, its effect on one's property, and the effect of not having a will. The course will deal with probate, responsibility of a personal representation, and taxation in regard to wills. The second part of the course deals with establishment of trust and its use to an individual.

A complete course listing begins on page 75.

ADULT HIGH SCHOOL DIPLOMA PROGRAM

Forsyth Technical Institute, in cooperation with the Winston-Salem/Forsyth County School System and Stokes County School System, offers day and evening courses for high school credit to adult students who wish to obtain an adult high school diploma. Courses are taught at Forsyth Technical Institute, Paisley High School, and South Stokes High School.

Classes meet weekly during the day and evening hours. There may be slight variations in time. Each class meets a total of 6 hours per week for 11 weeks. Students may carry as many as 4 courses per quarter. A total of 19 courses is needed to complete the program. A passing score on the high school competency test is required before graduation. No student will receive credit for a course if cumulative absences and/or tardies total more than 6 hours. Late enrollment does not represent absences.

Generally, persons to be enrolled must be 18 years or older. Under certain circumstances, however, 16 and 17 year olds may be enrolled by special permission. These applicants must still meet the requirements as set forth in state guidelines. Each enrollee must have completed the eighth grade in an accredited school or the eighth grade level in the Adult Basic Education Program conducted by the Department of Community Colleges.

Information regarding eligibility, courses needed for graduation, and registration for classes can be obtained from the Admissions Office at Forsyth Technical Institute between 8 a.m. and 8 p.m., Monday through Thursday, and between 8 a.m. and 5 p.m. Friday.

Registration is free; however, students must furnish their own books and supplies. Transcripts of work completed will be furnished by the Registrar's Office on written request of the student.

ADULT BASIC EDUCATION PROGRAM

The purpose of the Adult Basic Education Program is to provide the education for the uneducated or undereducated adult with less than an eighth grade education. The program is designed for those adults over 18 years of age whose inability to speak, read, or write the English language makes it difficult for them to find jobs or remain in their present jobs.

The primary objectives of the program are as follows:

- 1. to enable these adults to become less dependent on others;
- 2. to enhance their ability to benefit from other occupational training;
- 3. to increase their opportunities for better and more rewarding jobs;
- 4. to make them better able to meet their adult responsibilities:
- 5. to allow them to obtain an eighth grade educational level.

Adult Basic Education classes are held at various locations throughout Forsyth and Stokes counties. Classes are conducted during the day and evening hours. Classes usually meet two nights per week, three hours per night. No fees are charged to the student, and all books and materials are supplied free of charge.



ADULT CONTINUING EDUCATION

GENERAL COURSE LISTINGS

GENERAL COURSE LISTINGS	
Absenteeism and Turnover Reduction	33 hours
Abusive Use of Drugs	22 hours
Accounting, Basic I	66 hours
Accounting, Basic II	33 hours
Acrylic Painting	33 hours
Acrylic Painting, Advanced	33 hours
Activity Coordinator Training	521/2 hours
Adolescent Psychology	33 hours
Adult Growth and Parent Education (AGAPE)	24 hours
Adventures in Attitudes	30 hours
Affirmative Action: A Practical Approach	
for Employers	14 hours
Aging Process	6 hours
Air Conditioning Service I	44 hours
Air Conditioning Service II	44 hours
Air Conditioning Systems, Central	44 hours
Alcohol and Drug Abuse	22 hours
Algebra, Intro. to College	33 hours
Algebra I, Fundamentals of	55 hours
Amateur Radio License Preparatory	99 hours
Anatomy and Physiology (Venipuncture)	33 hours
Antiques	27½ hours
Appliance Service	44 hours
Art Activity for Young Children	30 hours
Art History	22 hours
Art of Motivating and Leading People	33 hours
Assertiveness Training	18 hours
Audio-Visual Techniques	30 hours
Auto Body Repair I	44 hours
Auto Body Repair II	44 hours
Auto Body Repair III	44 hours
Auto Familiarization	44 hours
Auto Tune-Up	44 hours
Auto Tune-Up	88 hours
Automotive Air Conditioning Service I	33 hours
BASIC Programming, Introduction to	33 hours
Basketweaving with Cane	33 hours
Basketweaving and Chair Caning	33 hours
Basketweaving with Pine Needles	33 hours
Batik and Japanese Art	33 hours
Beyond Separation and Divorce	22 hours
Bidding and Estimating for Construction Trades	33 hours

Blueprint Reading and Measuring Instruments	
for all Trades	44 hours
Blueprint Reading, Architectural	44 hours
Boating Skills and Seamanship	27½ hours
Bricklaying I	88 hours
Bricklaying II	88 hours
Building a Child's Self-Concept	33 hours
Business Law	33 hours
Business Letter Writing	33 hours
Business Math	33 hours
Cabinet Making, Introduction to	33 hours
Cake Decorating	33 hours
Calligraphy	33 hours
Candlewicking	33 hours
Cardiology, Basic	33 hours
Career and Life Planning	33 hours
Careers in Hotel/Motel Operations	33 hours
Ceramics, Handbuilt	33 hours
Ceramics, Advanced	33 hours
Ceramics, Beginning Ceramics, Intermediate	33 hours
Chair Caning	33 hours
Challenges of Later Life	33 hours
Child Abuse	33 hours
Child Psychology	20 hours
Childhood – The Enchanting Years	33 hours
Choral Music and Voice	22 hours
Cognitive Development for Young Children	33 hours 10 hours
Color TV Repair	66 hours
Commercial Art I	33 hours
Commercial Art II	33 hours
Communication Skills for Better Relationships	22 hours
Communication Skills for Couples	10 hours
Communications, Effective	33 hours
Communications: Overcoming the Fear of Public	
Speaking Computer Graphics I	22 hours
Computer Graphics II	88 hours
Conference Techniques for Supervisory Personnel	88 hours
Cooking and Nutrition	33 hours
Cooking: Basic	33 hours
Cooking: German	33 hours
Cooking: Gourmet, the Easy Way	33 hours
Cooking: Holiday	33 hours
Cooking: Home Baking, Bread	33 hours
Cooking: Microwave	33 hours
	33 hours

Cooking: Natural Food (Menu Planning with	
Natural Foods)	33 hours
Cooking: Protein without Meat	33 hours
Copper Tooling – Tin Tooling	33 hours
Coronary Care and EKG	33 hours
Cardiopulmonary Resuscitation (CPR)	12 hours
CPR and Standard First Aid	30 hours
CPR Instructor's Course	15 hours
CPR Maintenance Workshop	6 hours
Crafts, Holiday (& Decorations)	33 hours
Credit and Collection Skills	25 hours
Creating Activities for Young Children	33 hours
Crewel and Crosstitch	33 hours
Crewel Embroidery	33 hours
Crochet Lace	33 hours
Crocheting	33 hours
Current Events	44 hours
Custodial Techniques for Lead Housekeepers	33 hours
Cultural Awareness in Child Development	10 hours
Data Processing, Introduction to	44 hours
Death and Dying	22 hours
Decorative Tole Painting	33 hours
Decorative Tole (In Oils)	33 hours
Decorative Tole, Country Collectibles	33 hours
Decoupage	33 hours
Developmental Education	99 hours
Diabetes Care	18 hours
Digital Circuit Analysis	33 hours
Dollmaking (Porcelain & Ceramic)	44 hours
Dollmaking (Soft Sculpture)	33 hours
Drafting, Mechanical and Sketching I	66 hours
Drafting, Mechanical and Sketching II	66 hours
Drafting, Sheet Metal	44 hours
Dramatic Play	10 hours
Drawing, Figure	33 hours
Drawing, Freehand	33 hours
Drawing, Freehand II	33 hours
Easy Living or New Homemaker	22 hours
Economics for Business and Industry	33 hours
Effectiveness Training for Women	33 hours
Electrical Apprenticeship I	144 hours
Electrical Apprenticeship II	144 hours
Electrical Apprenticeship III	144 hours
Electrical Apprenticeship IV	144 hours
Electrical Code, National	25 hours
Electricity, Basic (For Electronic Servicing)	66 hours

Electrocardiology for Nurses (EKG)	10 hours
Electronic Calculators	22 hours
Electronics, Basic for Radio and TV Repair	66 hours
Electronics, Electronical Fundamentals, Level I	66 hours
Electronics, Semi-Conductor Control Devices,	
Level II	66 hours
Electronics, Control Device Applications and	
Troubleshooting, Level III	66 hours
Electronics, Linear IC's and Applications,	
Level IV	66 hours
Electronics, Digital Fundamentals, Level V	66 hours
Electronics, Digital Circuit Applications,	
Level VI	66 hours
Electronics, Computer Systems, Level VII	66 hours
Emergency Care Skills for Occupational Health	
Nurse	30 hours
Emergency Medical Technician (EMT)	96 hours
EMT Coordinator Workshop	12 hours
EMT Recertification	30 hours
Employee Guidance and Counseling	33 hours
Energy Conservation Management	12 hours
English as a Second Language	66 hours
English Review for Secretaries	33 hours
Environment for Artistic Development	10 hours
Exploratory Art	33 hours
Family and the Handicapped Child	27 hours
Family Budgeting	12 hours
Family Dynamics	33 hours
FCC Telephone Operators License Prep. I	99 hours
Financial Analysis for Small Businessmen	33 hours
Financial Management — Where Does Your Money Go?	12 hours
Fire Apparatus Practices	(vary)
Fire Behavior and Portable Fire Extinguishers	(vary)
Firefighting Procedures	(vary)
First Aid, Advanced	54 hours
First Aid, Advanced Recertification	24 hours
First Aid, Multimedia	8 hours
First Aid, Standard	18 hours
First Aid, Standard and CPR	30 hours
Flower Arranging	33 hours
Flower Making	33 hours
Fluid and Electrolytes	33 hours
Food Service Worker	22 hours
Forcible Entry	(vary)
French, Conversational	55 hours
Furniture Finishing and Refinishing	33 hours
	20 110010

GED Preparation	66 hours
Geometry, Descriptive	33 hours
Geriatric Nursing	22 hours
German, Conversational	44 hours
Greenhouse Management	33 hours
Greenhouse Operation and Horticulture	220 hours
Gross Motor Development of Young Children	10 hours
Ground School, Commercial Pilot	33 hours
Ground School, Co-Pilot	22 hours
Ground School, Instrument Pilot	66 hours
Ground School, Private Pilot	66 hours
Home Health, Basic	33 hours
Home Maintenance and Repair	33 hours
Homemaker — Home Health Aid	40 hours
Hose Practices	(vary)
Hospital Ward Clerk/Unit Secretary	2121/2 hours
How to Build a House (Lecture)	22 hours
How to Get Along with Your Child	22 hours
How to Sit for the Handicapped (Handi-sitters)	33 hours
How to Take Charge of Your Life	33 hours
How to Train Employees	33 hours
Human Relations in Business and Industry	22 hours
Human Relations (Venipuncture)	30 hours
Human Relations in Nursing	22 hours
Human Resources Development	33 hours
Human Psychology	22 hours
Income Tax, Personal	33 hours
Identifying Potential Managers and Supervisors	33 hours
Industrial Engineering, Introduction to	30 hours
Industrial Fire Pretection	(vary)
Industrial Control and Motor Controls, Part I	75 hours
Industrial Control and Motor Controls, Part II	75 hours
Industrial Control and Motor Controls, Part III	75 hours
Insight Into Dealing with the Cancer Patient	18 hours
Instructor Training	(vary)
Interior Decorating	27½ hours
IV Fluids and Electrolyte Balance	10 hours
Journalism, Introduction to	33 hours
Knitting	33 hours
Labor Laws for Supervisors	22 hours
Ladder Practices	(vary)
Lampshade Making and Decorating	33 hours
Landscaping, Basic	33 hours
Landscaping, Advanced	33 hours
Law for Consumer Protection	22 hours
Law for Laymen	22 hours

Leadership for Nurses	22 hours
Legal Aspects of Nursing	6 hours
Local History and Genealogy	42 hours
LPN Refresher	180 hours
Machine Shop Practice I	88 hours
Machine Shop Practice II	88 hours
Machine Shop Practice III	88 hours
Macrame	33 hours
Major Home Appliance Repair	(vary)
Management by Objectives	22 hours
Management, Principles of	33 hours
Managing Time	22 hours
Managing Time and Performance Evaluation	22 hours
Manual Language I	33 hours
Manual Language II	33 hours
Marketing, Principles of	33 hours
Marriage and the Family	22 hours
Medical Communication Skills (Venipucture)	33 hours
Medical Machine Transcriptions	50 hours
Medical Terminology	33 hours
Menu Planning and Buying	33 hours
Metric Conversions	33 hours
Metrics	22 hours
Microprocessor Fundamentals and Applications	33 hours
Millinery (Hat Making)	33 hours
Motor Carrier Rates	44 hours
Muzzleloading Gun Building	33 hours
Needle Art	33 hours
Needle Art, Advanced	33 hours
Newspaper in Education (NIE)	33 hours
Notary Public	4 hours
Nursing Assistant (day class)	220 hours
Nursing Assistant (evening class)	123 hours
Nursing for Homemakers	22 hours
Nutrient Environment for Infant and Toddler	
Development	10 hours
Nutrient and Weight Loss	22 hours
Nutrition Education	8 hours
Nutrition for Improved Health	3 hours
Nutrition on a Budget	22 hours
Office Supervision	33 hours
Offset Camera I	44 hours
Offset Camera II	44 hours
Offset Printing	44 hours
Oil and Gas Burner Service	44 hours
Oil Painting, Advanced	33 hours

Oil Painting, Beginning	33 hours
Oil Painting, Intermediate I	33 hours
Oil Painting, Intermediate II	33 hours
Old Trunk Restoration	33 hours
Oriental Brush Stroke	33 hours
OSHA Law and Industrial Safety for Supervision	33 hours
Over-the-Counter Drugs — Friend or Foe?	33 hours
Pen and Ink	33 hours
Personnel Accreditation Preparation	24 hours
Pharmacology Refresher	33 hours
Photography I	33 hours
Photography II	30 hours
Photography III	22 hours
Photomaking: Film making in Super 8/16 mm	33 hours
Physical and Language Development Programs for	
Handicapped Children	22 hours
Physical Assessment	36 hours
Physical and Mental Health Screening	10 hours
Pillow Finishing	33 hours
Pine Needle – Baskets and Crafts	33 hours
Planning for a Successful Career	33 hours
Plaster Crafting	33 hours
Plumbing Code Regulations and Application,	
N.C. Code	33 hours
Portraits, Charcoal	33 hours
Portraits, Oil	33 hours
Portraits, Pastel	33 hours
Preparation for Parenthood	18 hours
Preservation of Antique and Vintage Clothing	33 hours
Probelm Solving and Decision Making	22 hours
Professional Engineering Review	45 hours
Professional Retail Salesmanship	25 hours
Protective Breathing Equipment and other	,
Protective Equipment	(vary)
Provisions for Exceptional Children	10 hours
Psychological Development of Pre-school Children	20 hours
Psychology, Adolescent	(vary)
Psychology of Aging	22 hours
Psychology of Life and Work	33 hours
Psychology of Life and Work	33 hours
Psychology, Social Quality Control	33 hours 22 hours
	33 hours
Quilting Quilting, Advanced	33 hours
Quilting, Boutique	33 hours
Radio Repair	66 hours
naulo nepair	00 Hours

Real Estate Exam Preparation, Brokers	96 hours
Real Estate Exam Preparation, Salesmen	36 hours
Real Estate, Math	33 hours
Refrigeration Service I	44 hours
Religion: The Early Christian Church	22 hours
Residential Management	33 hours
Residential Wiring	33 hours
Respiratory and Hemodynamic Monitoring	33 hours
R.N. Refresher	250 hours
Role of the Day Care Teacher	10 hours
Room Arrangement in Day Care Centers	10 hours
Safety Management	33 hours
Salvages and Overhaul Practices	(vary)
Sculpture, Clay	33 hours
Secretarial Procedures	33 hours
Sewing: Advanced (Fitting I)	33 hours
Sewing: Advanced (Fitting II)	33 hours
Sewing: Bedspread Making	33 hours
Sewing: Clothing Construction I	33 hours
Sewing: Clothing Construction II	33 hours
Sewing: Drapery Making	33 hours
Sewing: Men's and Ladies' Jackets	33 hours
Sewing: Millinery (Hat Making)	33 hours
Sewing: Novelties with Ultrasuede	33 hours
Sewing: Pattern Drafting II	44 hours
Sewing: Pillow Finishing	33 hours
Sewing: Stretch Fabrics and Lingerie	33 hours
Sewing: Tailoring (Custom)	33 hours
Sewing: Tailoring (Modified)	33 hours
Sewing: Tailoring (Modified and Simulated Suede)	33 hours
Sheet Metal Layout and Fabrication I	88 hours
Sheet Metal Layout and Fabrication II	88 hours
Sheet Metal Layout and Fabrication III	88 hours
Shop Math	33 hours
Shorthand, Gregg I	66 hours
Shorthand, Gregg II	66 hours
Shorthand, Gregg Refresher	30 hours
Shorthand, Gregg Speed in Dictation	33 hours
Shorthand, Speedbuilding for all Notetakers	33 hours
Shorthand, Speedwriting I	66 hours
Shorthand, Speedwriting II	33 hours
Signed English I	33 hours
Signed English II	33 hours
Skills for Pre-School Teachers	33 hours
Small Business and the Federal Bankruptcy Act	22 hours
Small Business Marketing Skills	22 hours

Small Engine Repair	66 hours
Smocking	33 hours
Sociological Aspects of Aging or Social	00 110013
Gerontology	33 hours
Sociology of Juvenile Delinquency	30 hours
Solar Energy, Introduction to	
Solar Design, Passive	22 hours
	22 hours
Solar Greenhouse Design and Construction	35 hours
Spanish, Conversational II	44 hours
Spanish, Conversational III	44 hours
·	44 hours
Speaking, Effective	22 hours
Speaking, Public	22 hours
Specimen Collection (Venipuncture)	33 hours
Speed Reading	33 hours
Stained Glass	33 hours
Starting Your Own Business	33 hours
Statistics, Introduction to	33 hours
Stenciling	33 hours
Step-Families — Yours, Mine, Ours	22 hours
Stock Market	22 hours
Stress Management	10 hours
Successful Advertising for Small Business	33 hours
Supervision, Principles of	33 hours
Surveying I	33 hours
Surveying II	33 hours
Swedish Weaving (Embroidery)	33 hours
Tatting	33 hours
Teaching for Independence in Young Children	10 hours
Technical Illustrating (Pictorial Drafting)	44 hours
Techniques for Performing a Complete Physical	
Examination	36 hours
Television Repair, Black and White	66 hours
Time and Motion Study	22 hours
Time Management	22 hours
Traffic Management	44 hours
Transactional Analysis, Introduction to	22 hours
Transactional Analysis, Advanced	22 hours
Travel and Tourism Occupations	30 hours
Trigonometry	22 hours
Turning Negative Stress Into Positive	
Experiences	22 hours
Typing I	66 hours
Typing II	66 hours
Typing, Personal	66 hours
Upholstery	33 hours
opholstery	Jo Hours

Using Your Mind Effectively	16 hours
Ventilation	(vary)
Wallpaper Hanging	15 hours
Wastewater Math, Advanced	18 hours
Wastewater Treatment Plant Operators Training	60 hours
Watercolor I	33 hours
Watercolor II	33 hours
Weaving	33 hours
Weight Control Through Habit Not Diet	22 hours
Welding, Advanced Shielded Metal Arc	
Welding (SMAW)	88 hours
Welding, Basic	88 hours
Welding, Basic Oxyacetylene	88 hours
Welding, Basic Arc	44 hours
Welding, Basic Arc	88 hours
Welding, Gas Metal Arc (MIG)	88 hours
Welding, Gas Tungsten Arc	88 hours
Welding, Inert Gas (TIG and MIG)	88 hours
Welding, Introduction to Nuclear Pipe	88 hours
Welding, Introduction to Pipe	44 hours
Wills, Trusts, Probate	22 hours
Woodcarving	33 hours
Woodworking	33 hours
Woodworking I	33 hours
Woodworking II	33 hours
Word Processing Concepts	24 hours
Writing, Creative	25 hours
Writing, Effective	22 hours











ASSOCIATE IN APPLIED SCIENCE DEGREE PROGRAM

ASSOCIATE IN APPLIED SCIENCE DEGREE PROGRAM

The curricula described on the following pages are technical in nature and, upon completion, will award the Associate in Applied Science degree. This degree is recognized nationally to indicate the successful completion of two years of education beyond the high school level.

The listing of courses for each curriculum is shown in the proper sequence; consequently, applicants should plan their attendance to be over 21 or 24 consecutive months.

The Institute's purpose is to offer the technical courses which will prepare the graduate for immediate employment opportunities. Therefore, the ability to transfer to other institutions of higher education, and transfer credit granted, will be determined by the receiving institution.

Sample Course Listing

			С	L	Р	QH	
ENG	102	COMPOSITION	3	0	0.	3	
Course Prefix	Course Number	Course Title	Classroom Hours per week	Laboratory Hours per week	Practicum per week (Practical application or clinical experience per week.)	Quarter Hours Credit	

Contact Hours per week



ARCHITECTURAL TECHNOLOGY T-041

The Architectural Technology curriculum provides individuals with knowledge and skills that will lead to employment and advancement in the field of architectural technology. Technical courses are included which will enable the graduate to advance into related areas of work as job experience is obtained or to continue toward an advanced degree in an associated field of technology.

Architectural technicians translate the architect's design sketches into complete and accurate plans and drawings for construction purposes. The technician will be involved in work requiring a knowledge of drafting, construction materials, mechanical and structural systems, estimating, building codes, and specifications.

Initial employment opportunities exist with architectural and engineering firms, private utilities, contractors, and municipal governments.

Total credit hours: 118



Course Titl	Hours Per Week				
FIRST QUA	RTER	С	L	Р	QH
MAT 101	Technical Mathematics I	5	0	0	5
ENG 100	Oral Communication	3	0	0	3
DFT 106	Architectural Drafting I	2	0	6	4
DFT 181	History of Architecture and Construction	5	0	0	5
DFT 151	Computer Graphics I	2	0	0	2
		 17	0	6	19

SECO	ם מער	UARTER				
MAT ENG CIV DFT	102 101 105 107	Technical Mathematics II Introduction to Written Communication Architectural Materials and Methods Architectural Drafting II	5 3 2 13	0 0 2 0 	0 0 0 6 6	5 3 4 4 -4 16
MAT AHR PHY DFT	103 106 111 108	Technical Mathematics III Architectural Mechanical Equipment Physics — Mechanics Architectural Drafting III	5 3 0 11	0 0 2 0 -2	0 3 0 9	5 4 4 3
FOUF	RTH QU	JARTER	1 1	2	12	16
DFT PHY ECO	104 150 113 102	Applied Mechanics Site Planning Physics — Electricity Economics I	5 2 3 3 - 13	0 0 2 0 -	0 6 0 0 6	5 4 4 3
	1 QUAI					
MEC DFT ENG DFT	205 220 102 233	Strength of Materials Architectural Drafting IV Composition Office Practice Seminar	3 2 3 2 10	2 0 0 0 	0 9 0 0 -	4 5 3 2
SIXTH	H QUA	RTER	10	2	9	14
DFT DFT	221 235	Architectural Drafting V Codes, Specifications, and Contract Documents	2	0	9	5
PSY ENG	206 103	Applied Psychology Technical Report Writing Elective*	3 3 3 14	0 0 0 0	0 0 0 	4 3 3
SEVE	NTH Q	UARTER	14	U	12	18
PHY ISC	114 201	Physics — Light and Sound Industrial Organization and	3	2	0	4
DFT DFT	222 236	Management Architectural Drafting VI Construction Estimating and	3 2	0	9	3 5
		Field Inspecting Elective*	3 3 14	0 0 -2	$\begin{array}{c} 3 \\ 0 \\ \hline 12 \end{array}$	4 3 19

C - Class

L - Lab

P - Practicum

^{*}Unspecified electives may be any course in any associate degree program provided student meets prerequisites.

ASSOCIATE DEGREE NURSING T-059

This program provides a combination of general education and nursing education. Clinical experience is provided in selected hopitals and other community health agencies. Graduates receive an Associate in Applied Science degree in Nursing and are eligible to write the Licensing Examination to become Registered Nurses (RN).

Total credit hours: 106

Course Title



ADN CURRICULUM BY QUARTERS

Hours Per Week

			С	L	CE	QH
	FIRST Q	JARTER				
C	BIO 10 NUR 11 NUR 12 SOC 02	9 Pharmacology 0 Medical-Surgical Nursing I	3 2 4 2 11	2 2 0 6	0 0 6 0 6	0 3 C 7 A 0 14
	SECOND	QUARTER	11	0	0	14
	OLOGIAD	GOATTEN				
DEF	BIO 10 NUT 10 PSY 10 NUR 12	1 General Nutrition 1 Psychology	3 3 4	2 0 0 2	0 0 0 6	D 3 C 3 F 7
			13	4	6	17
	THIRD Q	UARTER				
AC	BIO 11 SOC 10 NUR 12	3 Sociology	3 4 10	2 0 0 	0 0 12 12	A 3 8 15

	FOUR	RTH Q	JARTER					
	ENG PSY NUR	101 110 126	Introduction to Written Communication Life Span Psychology Medical-Surgical Nursing IV	3 3 4 10	0 0 0	0 0 12	3 3 8 14	
	FIFTH	I QUA	RTER	10	U	12	14	
D	SAF		Cardiopulmonary Resuscitation (CPR)*	0 3 3	0	0	0	5 13
) ENG NUR	102 216	Composition Maternity Nursing or	3 4	0	0 12	£ 3 8	6
	NUR	218	Pediatric Nursing	<u>4</u>	0	or 12 12	<u>8</u>	
	SIXTH	H QUA	RTER	10	U	12	14	
	ENG PSY NUR	103 111 216	Technical Report Writing Abnormal Behavior Maternity Nursing	3 3 4	0	0 0 12	3 3 8	
			or	4	U	or	0	
	NUR	218	Pediatric Nursing	4 10	0 0	12 12	<u>8</u>	
	SEVE	NTH Q	UARTER	10	U	12	14	
1		108	Consumer Economics Elective	3	0	0	B3	9
	NUR	220	Medical-Surgical Nursing V (1/2 quarter) and	4	0	18 and	5	
	NUR	224	Psychiatric Nursing (½ quarter) or	4	0	12	4	
1	**NUR	222	Medical-Surgical Nursing VI (1/2 quarter)	4	0	or 18	5	
**			ARTER (Short Session)	10	0	18	15	
	NUR		Psychiatric Nursing (1/2 quarter) or	4	0	12 or	4	
	NUR	222	Medical-Surgical Nursing VI (1/2 quarter)	4	0	18	5	
				4	0	18	5	

35 63

^{*}CPR certification by the American Heart Association is required for graduation. The course will be offered during the fifth quarter and current certification must be maintained for the duration of the program.

^{**}Some students will be enrolled in Medical–Surgical Nursing VI during the 7th quarter and others will complete it during the 8th quarter. Some students will be enrolled in Psychiatric Nursing during the 7th quarter and others in the 8th quarter.

^{***}This is a short session of five weeks.

BANKING AND FINANCE T-112

The Banking and Finance program is intended to provide inservice banking employees with professional preparation in the banking industry for the purpose of improving job performance as well as to prepare students for management positions. The program is also available to students who wish to pursue a career in banks, savings and loan associations, or other financial institutions. By completing the various requirements shown in the detailed curriculum listing, the student can earn AIB credit as well as earning the Associate in Applied Science Degree.

Total credit hours: 112



Course Title		Hou	rs Per	Week	ОН
FIRST QUA	RTER		-	·	Q. I
ENG 100	Oral Communication	3	0	0	3
BUS 101	Introduction to Business	5	0	0	5
BUS 109	Business Mathematics	5	0	0	5
BUS 102	Typewriting I	2	0	3	3
		15	0	3	16

		JARTER				
	101 202	Introduction to Written Communication Principles of Banking	3 4	0	0	3 4
,	120	Accounting I	4	0	3	5
BUS 1	110	Office Machines	2	0	3	3
			13	0	6	15
THIRD						
	102 115	Composition Business Law I	3	0	0	3
	121	Accounting II	4	0	3	5
	102	Economics I	3	0	0	3
AIB 2	209	Installment Credit	4	0	0	4
			17	0	3	18
		JARTER	0	_	_	0
	116 101	Business Law II Principles of Business Data Processing	3	0	0	3 4
	231	Savings and Time Deposit	4	0	0	4
AIB 2	210	Money and Banking	4	0	0	4
ECO .	104	Economics II	3	0	0	3
	0114		17	2	0	18
FIFTH			3	0	0	3
	205 206	Business Report Writing Applied Psychology	3	0	0	3
	205	Bank Management	4	0	0	4
BUS 2	232	Sales Development	3	0	0	3
		Elective*	3	0		*******
SIXTH	OLIA	DIED	16	0	0	16
	206	Business Communications	3	0	0	3
	233	Analysis of Financial Statements	4	0	0	4
BUS :	209	Real Estate Finance	5	0	0	5 4
AIB :	203	Bank Investments	4	0	0	
051/51		NUA DEED	16	0	0	16
		QUARTER Mallating for Bonkoro	4	0	0	4
	239 235	Marketing for Bankers Loan and Discount	3	0	0	3
	272	Principles of Supervision	3	0	0	3
		Elective*	3	0	0	3
			13	0	0	13

^{*}Unspecified electives may be any course in any associate degree program provided student meets prerequisites.

C - Class

L - Lab

P - Practicum

BUSINESS ADMINISTRATION — ACCOUNTING OPTION T-018

Accounting is one of the fastest growing employment fields in America today. These opportunities result from the tremendous business and industrial expansion in all parts of the country. Because of this emphasis, there is a growing need for trained people in the area of accounting to help managers keep track of a firm's operation. The Accounting curriculum is designed to fill this need by offering students the necessary accounting theories and skills for entry into the accounting profession.

The Accounting curriculum is designed to give the student an understanding of the principles of organization and management in business operations, an understanding

of the statements, and skill in effective communication for business.

Total credit hours: 108



CURRICULUM BY QUARTERS

Course Title

FIRST QUARTER

ENG	100	Oral Communication
BUS	120	Accounting I
BUS	109	Business Mathematics

BOS	102	Typewriting
-----	-----	-------------

C	urs Per L	Week P	QH
3	0	0	3
4	0	3	5
5	0	0	5
2	0	3	3
4.4			
14	Ω	6	16

SECO	ND QI	JARTER				
BUS BUS BUS		Introduction to Written Communication Accounting II Taxes Office Machines	3 4 2 2 	0 0 0 0 -	0 3 3 3 9	3 5 3 3 14
	D QUA		3	0	0	3
ENG BUS ECO BUS BUS	230 210	Composition Accounting III Economics I Advanced Taxes Business Statistics	3 2 5 17	0 0 0 0 0 0 0	3 0 3 0 6	5 3 3 5 19
FOUF	RTH Q	UARTER				
EDP BUS ECO BUS	101 221 104 123	Principles of Business Data Processing Intermediate Accounting I Economics II Business Finance	3 5 3 5 16	2 0 0 0 	0 0 0 0 0	4 5 3 <u>5</u> 17
FIFTH	H QUA	RTER				
ENG BUS EDP BUS	205 222 120 115	Business Report Writing Intermediate Accounting II Introduction to Computer Programming Business Law I	3 5 3 	0 0 2 0 - 2	0 0 0 0 -	3 5 4 3 15
	H QUA		0	^	0	3
ENG BUS BUS BUS	206 227 225 116	Business Communications Intermediate Accounting III Managerial Cost Accounting I Business Law II	3 2 2 3 10	0 0 0 0 	3 0 6	3 3 3 12
SEVI	ENTH	QUARTER				0
BUS BUS BUS BUS	269	Managerial Cost Accounting II Governmental Accounting Auditing Principles of Supervision Elective*	2 2 2 3 3 -12	0 0 0 0 0	3 3 0 0 -	3 3 3 3

^{*}Unspecified electives may be any course in any associate degree program provided student meets prerequisites.

C - Class

L - Lab

P - Practicum

QH - Quarter Hours Credit

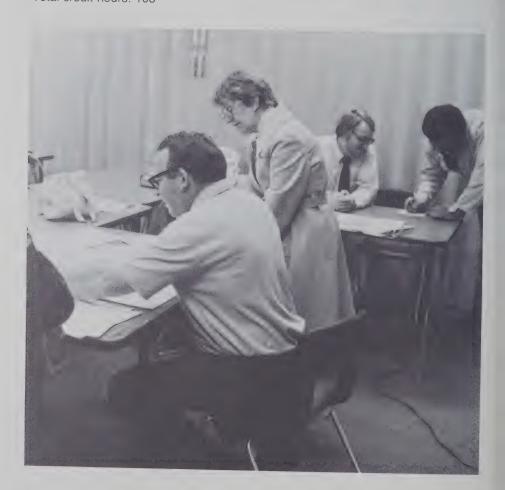
BUSINESS ADMINISTRATION T-018

The distribution of goods has been generally recognized as the largest single problem in business. Techniques for mass production of goods have been perfected, and better ways to get these products to the cunsumer are needed.

The Business Administration program is designed to (1) develop the student's knowledge of the fundamentals of marketing and distribution and to provide him with an understanding of organization and management, (2) develop skills in selling, advertising, and finance, and (3) familiarize the student with growth problems confronting business today.

Jobs available which graduates could fill are in the areas of retailing, wholesaling, industrial marketing, finance, and service industries. Service performed by graduates include sales, advertising, merchandising, buying, credit, and personnel.

Total credit hours: 103



Course Title	Hour	s Per	Week P	QH
FIRST QUARTER ENG 100 Oral Communication BUS 102 Typewriting I BUS 109 Business Mathematics BUS 101 Introduction to Business	3 2 5 5	0 0 0 0	0 3 0 0	3 3 5 5
SECOND QUARTER	15	0	3	16
ENG 101 Introduction to Written Communication BUS 120 Accounting I ECO 102 Economics I BUS 110 Office Machines	3 4 3 2 — 12	0 0 0 0	0 3 0 3 -6	3 5 3 3 14
THIRD QUARTER				
ENG 102 Composition BUS 115 Business Law I BUS 121 Accounting II ECO 104 Economics II	3 4 3 — 13	0 0 0 0 —	0 0 3 0 -	3 5 3 - 14
FOURTH QUARTER				
BUS 116 Business Law II EDP 101 Principles of Business Data Processing BUS 229 Taxes BUS 239 Marketing	3 2 5 -13	0 2 0 0 -	0 0 3 0 -3	3 4 3 5 — 15
FIFTH QUARTER	10	£		10
BUS 128 Personal Financial Management BUS 232 Sales Development PSY 206 Applied Psychology	3 5 3 	0 0 0 0 	0 0 0 0 -	3 5 3 3 14
SIXTH QUARTER				
ENG 206 Business Communications BUS 243 Advertising BUS Electives	3 4 6 — 13	0 0 0 —	0 0 0 - 0	3 4 6 — 13
SEVENTH QUARTER				
BUS 235 Business Management BUS 272 Principles of Supervision BUS Electives	3 5 3 6 17	0 0 0 0	0 0 0 0 0	3 5 3 6 —
* I have a standard and the second and accordance or organization of the second and the second a	provided	studer	t meet	s pre-

^{*}Unspecified electives may be any course in any associate degree program provided student meets prerequisites.

C – Class

L - Lab

P - Practicum

QH - Quarter Hours Credit

EARLY CHILDHOOD SPECIALIST T-073

Early childhood specialists are concerned with providing for infants and young children in a program which will promote the optimal development of each child. The specialist must understand and be able to (1) meet the physical and nutritional needs of pre-school children; (2) provide activities which stimulate intellectual, emotional, and social growth of children; (3) guide children in the formation of acceptable habits and attitudes; and (4) assist children in their learning to communicate effectively with others. In addition, the early childhood education specialist must be able to work effectively with parents and, where necessary, provide guidance in improving the child's home experience.

This curriculum is designed to provide the educational preparation of individuals to serve in a variety of roles in facilities concerned with the care and development of infants and young children. It also provides individuals with the knowledge, understanding, and skills needed to work effectively with preschool children in various stages of development.

The program is built around the developmental approach which aims for the optimal development of each child. As staffing requirements of both day care and residential facilities increase, graduates of this curriculum should find many different types of jobs available.

Total credit hours: 115



CURRICULUM BY QUARTERS

Course Title Hours Per Week L P QH **FIRST QUARTER** ENG 100 Oral Communication 3 0 0 3 PSY 102 General Psychology 5 0 0 5 EDU 101 Child Growth and Development 6 0 0 6 HEA 101 Personal Hygiene and Health 3 0 0 3 17 0 0 17

SECONI	D QUARTER				
		0	0	0	0
ENG 10 PSY 10	D5 Human Growth and Development:	3	0	0	3
P31 11	Prenatal and Infant	2	0	0	2
EDU 10		3 4	0 2	0	3 5
EDU 10		3	2	0	4
MAT 1		3	0	0	3
IVIATI	16 General Mati			-	
		16	4	0	18
THIRD (QUARTER				
SCI 10	O1 General Science	3	0	0	3
ENG 10	02 Composition	3	0	0	3
	O5 Child Psychology	3	0	0	3
EDU 10	O3 Working with Young Children	4	0	10	5
NUT 10	O2 Nutrition for Young Children	3	2	0	4
		16	2	10	18
FOURTH	H QUARTER	10	۲.,	10	10
ENG 20		3	0	0	3
EDU 1		3	0	0	3
EDU 1		3	0	0	3
EDU 1		3	0	0	3
EDU 1		2	0	3	3
EDU 1		3	2	0	4
LDO I	To Thousand Caroty for Young Ormanor		_	_	
FIFTU C	NIARTER	17	2	3	19
	QUARTER				
SOC 1	0,	3	0	0	3
ENG 1		3	0	0	3
EDU 1	Music and Creative Movement for	0	_	0	0
	Young Children	3	0	0	3
EDU 1		_	0	10	0
	and Math	_5	0	10	6
		14	0	10	15
SIXTH C	QUARTER				
EDU 2	03 The Exceptional Child	3	2	0	4
EDU 2		5	0	10	6
	05 Families in the American Culture	3	0	0	3
	09 Physical Activities: Games for				
	Young Children	2	2	0	3
		13	4	10	16
CEVEN	TH QUARTER	13	4	10	10
		0	0	0	3
	06 Special Problems	3	0	0 20	6
	11 Practice Teaching	4	0		3
EDU 2	04 Parent Education	3	0	0	
		10	0	20	12
C - Class					

C - Class

L - Lab

P - Practicum

ELECTRONIC DATA PROCESSING — BUSINESS T-022

Computers and information sciences have affected the lives of most Americans, and benefits derived from computers have caused increased demands for personnel in computer science. Because the training of programming personnel on the job is so expensive, there is an increasing demand for the qualified graduate in this area. Such a graduate must think analytically and logically; understand data processing concepts; possess programming skills; and have a knowledge of business, mathematics, accounting, and English sufficient to enable him to use his programming skills effectively.

The Electronic Data Processing program is designed to train students for employment as computer programmers in business. Students write and test programs in the languages used most widely in business today with particular emphasis placed on COBOL. Students program on up-to-date equipment of the type most used in industry. A study of computer systems and basic systems design and analysis is included.

Total credit hours: 108

Course	Title		ırs Per	Weel	<
FIRST C	DUARTER	С	L	Р	QH
MAT 1 EDP 1	Oral Communication EDP Mathematics I Introduction to Data Processing Logic and Decision Making	3 5 3 5	0 0 2 0	0 0 0 0	3 5 4 5
SECONI	QUARTER	16	2	0	17
BUS 12 MAT 11 EDP 10	2 EDP Mathematics II	4 5 5	0 0 2	3 0 0	5 5 6
THIRD C	QUARTER	14	2	3	16
ENG 10 BUS 12 BUS 21 EDP 11	Accounting II Business Statistics	3 4 5 3	0 0 0 2 - 2	0 3 0 0	3 5 5 4
FOURTH	QUARTER	15	2	3	17
ENG 10 EDP 11 EDP 20	Composition EDP Selection COBOL Programming II	3 2 3 11	0 2 4 2 	0 0 0 0 -	3 4 4 4 4 15
		1 1	0	U	10

FIFTH	d QUA	RTER					
ENG EDP EDP	206 112 205	Business Communications COBOL Programming III Systems Design and Analysis I EDP Selection	3 2 3	0 4 2 2	0 0 0	3 4 4 4	
CIVT	H QUA	DTED	11	8	0	15	
		Sociology Elective	3	0	0	3	
EDP	208	Advanced Programming EDP Selection	3 3	2	0	4	
		Business Elective	3	0	0	3	
			12	4	0	14	
SEVE	SEVENTH QUARTER						
	205	Business Report Writing	3	0	0	3	
EDP EDP	210 220	Language Survey Research Project	2	0 8	0	2 5	
		EDP Selection	3	2	0	4	
			9	10	0	14	
EDP Selections will be specified by the Institution from the following list of courses:							
EDP EDP EDP	106 230 240 250	Assembly Language Programming II Introduction to FORTRAN PL/1 Programming I RPG Programming	2 3 3	4 2 2 2	0 0 0	4 4 4 4	
	200	The Control of Control	0	Eu.	0		

C – Class L – Lab P – Practicum



TECHNOLOLGY T-045

Electronics has become indispensible to such fields as space technology, medical, automotive, aviation, entertainment, and manufacturing. Electronics Engineering Technology is an application oriented field utilizing electronic systems for information processing; to control manufacturing processes; and to assist in product design and evaluation. The Electronics Engineering Technology curriculum is designed to provide the necessary skills and knowledge training required for entrance into this exciting career. This is an ABET accredited curriculum.

Total credit hours: 120



CURRICULUM BY QUARTERS

Course Title			Hours Per Week			
FIRST QUARTER C L P QH						QH
MAT ENG ELC	101 100 101	Technical Mathematics I Oral Communications Fundamentals of Electricity I	5 3 5 	0 0 2 -	0 0 6	5 3 8
SECO	SECOND QUARTER			2	6	16
MAT ENG ELC	102 101 102	Technical Mathematics II Introduction to Written Communication Fundamentals of Electricity II	5 3 5 - 13	0 0 2 	0 0 6 -	5 3 8
THIR	D QUA	RTER	13	۷.	O	10
MAT ENG PHY ELN	103 102 111 110	Technical Mathematics III Composition Physics — Mechanics Transistor Applications	5 3 3 5 —	0 0 2 2 4	0 0 0 6 6	5 3 4 8 20
		JARTER				
MAT PHY ELN	201 112 210	Technical Mathematics IV Physics — Materials & Heat Linear Integrated Circuits	5 3 5 — 13	0 2 2 	0 0 6 —	5 4 8 — 17
FIFTH QUARTER						17
ENG ELN ELN	103 219 235	Technical Report Writing Digital Fundamentals Industrial Electronics I	3 5 5 	0 0 0 —	0 6 6 -	3 7 7 —————————————————————————————————
SIXTH QUARTER						. ,
DFT PSY ELN ELN	113 206 236 220	Blueprint Interpretation — Mechanical Applied Psychology Industrial Electronics II Digital Systems	3 3 4 —	0 0 0 0 0	0 0 6 6 	3 5 6 17
SEVENTH QUARTER			13	0	12	17
PHY ECO ELN ELN	114 102 245 247	Physics — Light and Sound Economics I Electronic Design Project Electronic Systems: Computers	3 2 4 12	2 0 0 0 -	0 0 6 6 	4 3 4 6 7

C - Class

L - Lab

P - Practicum

WORD PROCESSING/SHORTHAND OPTION T-030

There is a technological revolution taking place involving the use of electronic storage and retrieval of information in businesses. This curriculum includes two quarters of word processing, along with basic skills in shorthand, typing, English, office procedures, accounting, and business data processing.

Total credit hours: 108



Course Title			Hours Per Week					
			С	L	P	QH		
FIRS1	Γ QUA	RTER						
ENG	100	Oral Communication	3	0	0	3		
BUS	109	Business Mathematics	5	0	0	5		
ECO	108	Consumer Economics	3	0	0	3		
BUS	102	Typewriting I	2	0	3	3		
EDP	101	Principles of Business Data Processing	3	2	0	4		
			16	2	3	18		

SEC	OND C	QUARTER				
ENG BUS BUS BUS	101 103 106 110	Introduction to Written Communication Typewriting II Shorthand I Office Machines	3 2 3 2 10	0 0 0 0 -	0 3 3 3 9	3 4 3 - 13
ENG	102	Composition	3	0	0	3
BUS	104 107	Typewriting III Shorthand II	2	0	3	3
BUS		Business Law I Personality Development	3	0	0	3
101	112	reisonality Development	3	0	0	3
	RTH Q	UARTER	14	0	6	16
BUS	108 105	Shorthand III Typewriting IV	3	0	3	4
BUS	211	Reprographics	2	0	3	3
ENG	205	Business Report Writing	3	0	0	3
FIFTH	H QUA	RTER	10	0	9	13
BUS ENG	206 206	Dictation/Transcription Business Communications	3	0	3	4
BUS	213	Filing	3 2	0	0	3 2
BUS	118	Secretarial Accounting I Elective	4 3	0	3	5
			<u>-</u> 15	0 0	<u>0</u> 6	3 17
	H QUA		10	O	0	17
BUS	250 214	Word Processing I Secretarial Procedures	1 5	4	0	3 5
BUS BUS	113 119	Vocabulary/Terminology I	3	0	0	3
BU3	119	Secretarial Accounting II	4	0	3	5
	NTH G	QUARTER	13	4	3	16
SOC	103 251	Sociology Word Processing II	3 1	0	0	3
BUS	272	Principles of Supervision	3	4 0	0	3
BUS	219	Office Application (or BUS Elective) Elective	1	0	20 0	3
			11	4	20	15
C - Cla						

L-Lab

P - Practicum

WORD PROCESSING/MACHINE TRANSCRIPTION OPTION T-033

There is a technological revolution taking place involving the use of electronic storage and retrieval of information in businesses. This curriculum includes two quarters of word processing, along with basic skills in machine transcription, typing, English, office procedures, accounting, and business data processing.

Total credit hours: 104

Course	e Title			s Per		
FIDOT	OLIAI	DTED.	С	L	Р	QH
BUS ECO BUS EDP	100 109 108 102 101	Oral Communication Business Mathematics Consumer Economics Typewriting I Principles of Business Data Processing	3 5 3 2 3 16	0 0 0 0 2 -	0 0 0 3 0 -	3 5 3 4 18
		UARTER	•		0	0
BUS BUS	101 103 110 113	Introduction to Written Communication Typewriting II Office Machines Vocabulary/Terminology I	3 2 2 3 —	0 0 0 0 -	0 3 3 0 6	3 3 3
THIRD						
BUS BUS BUS	102 104 114 115 112	Composition Typewriting III Vocabulary/Terminology II Business Law I Personality Development	3 2 3 3 	0 0 0 0 0 0	0 3 0 0 0 3	3 3 3 3
		UARTER				
ENG PSY BUS	105 205 206 211	Typewriting IV Business Report Writing Applied Psychology Reprographics	2 3 3 2 	0 0 0 0 -	3 0 0 3 -6	3 3 3 - 12
FIFTH			2	0	2	2
ENG	112 206 118 213	Machine Transcription I Business Communications Secretarial Accounting I Filing Elective	2 3 4 2 3 14	0 0 0 0 0 -	3 0 3 0 0 6	3 5 2 3 16

SIXTH QUA	ARTER				
BUS 250 BUS 214 BUS 119 BUS 212	Word Processing I Secretarial Procedures Secretarial Acounting II Machine Transcription II	1 5 4 2	4 0 0 0	0 0 3 3	3 5 5 3
SEVENTH	QUARTER	12	4	6	16
BUS 251 BUS 215 BUS 272 BUS 219 SOC 103	Word Processing II Machine Transcription III Principles of Supervision Office Application (or BUS Elective) Sociology	1 2 3 1 3	4 0 0 0 0	0 3 0 20 0	3 3 3 3
0 01		10	- 4	23	15

C - Class

L - Lab

P - Practicum



INDUSTRIAL MANAGMENT TECHNOLOGY T-049

Industry's needs in positions of supervision and mid-management have grown complex with the development of new methods of manufacturing and with the changes in the national economy. This need has added emphasis to the necessity for well-trained individuals that can understand new methods and keep abreast of trends in the economy. The supervisor and persons in mid-management must be concerned daily with human behavior and the psychological factors which affect personnel working under their direction. They must also be conscious of the responsibilities of their position toward the total economic well being of the industry.

These requirements have set forth the objectives in developing this program to prepare people for supervisory and mid-management responsibilities in industry.

The program is prepared to develop the individual's abilities in the art of communicating with his fellow worker by providing him with training in business and industrial management, psychology, production methods, and the general and social education that broadens one's perspective. This training should provide one with the opportunity to enter into an industrial occupation and, with experience, assume the responsibilities that go with supervisory and mid-management positions in industry.

Total credit hours: 118

Course Title	e	Ho C	urs Pe	r Wee	k QH
FIRST QUA	RTER		-	r	QII
ENG 100 BUS 120 MAT 101 BUS 101	Oral Communication Accounting I Technical Mathematics I Introduction to Business	3 4 5 5	0 0 0 0	0 3 0 0	3 5 5 5
		17	0	3	18
SECOND Q	UARTER				
ENG 101 BUS 121 ECO 102 SOC 102	Introduction to Written Communication Accounting II Economics I Principles of Sociology	3 4 3 5	0 0 0 0 	0 3 0 0 -	3 5 3 5 16
THIRD QUA	RTER	15	0	3	10
ENG 102 BUS 115 BUS 210 BUS 122 ECO 104	Composition Business Law I Business Statistics Accounting III Economics II	3 3 5 4 3 18	0 0 0 0 0	0 0 0 3 0 -	3 5 5 3 19

FOUF	TH QL	JARTER				
EDP ENG PSY ISC	101 205 101 201	Principles of Business Data Processing Business Report Writing Psychology Industrial Organization and Management Elective*	3 3 3 3 15	2 0 0 0 0 	0 0 0 0 0 -	4 3 3 3 3 — 16
FIFTH	I QUAF	RTER				
BUS ISC DFT	101 235 202 113	Introduction to Occupational Safety & Health Elective Business Management Quality Control Blueprint Interpretation — Mechanical	4 3 5 3 3 18	0 0 0 2 0 	0 0 0 0 0 0	4 3 5 4 3 - 19
BUS	239	Marketing	5	0	0	5
ISC MEC PSY	203 206 206	Motion and Time Study Process Analysis and Estimating Applied Psychology	3 3 	2 4 0 -6	0 0 0 -	4 5 3
SEVE	NTH C	NUARTER				
BUS BUS MEC	272 233 213	Principles of Supervision Personnel Management Production Planning Elective*	3 4 3 - 13	0 0 0 0	0 0 0 0 	3 4 3

*Unspecified electives may be any course in any associate degree program provided student meets prerequisites.

C - Class

L - Lab

P - Practicum



MANUFACTURING ENGINEERING TECHNOLOGY T-050

This field is perhaps one of the most promising ones that a student with an interest in science and mechanics may enter in our modern technical world. The demand for trained technicians has exceeded the supply for many years, and every indication is that this situation will continue. This two-year program prepares the student for employment as an engineering assistant in such fields as quality control, plant layout, methods and time study, metallurgy, technical sales, and management. Job opportunities exist in industry, civil service, military service, and the consulting fields.

The Manufacturing Engineering Technology program (MET) combines academic courses with laboratory and shop practice. An extensive machine shop, a well equipped material testing laboratory, as well as chemistry and physics laboratories, insure that actual job techniques will be practiced. This is an ABET accredited curricu-

lum.

Total credit hours: 120



Course Title		Hours Per Wee		Week	ek		
FIRST QUAI	RTER	С	L	Р	QH		
MAT 101 ENG 100 DFT 101 MEC 101 MEC 165	Technical Mathematics I Oral Communication Technical Drafting I Machine Processes I Introduction to Basic Programming for MET	5 3 2 1 1 1 12	0 0 0 0 0	0 0 6 6 3	5 3 4 3 2 17		

SECOND Q	UARTER				
MAT 102 ENG 101 PHY 111 DFT 102 MEC 102	Technical Mathematics II Introduction to Written Communication Physics — Mechanics Technical Drafting II Machine Processes II	5 3 2 1 14	0 0 2 0 0 -	0 0 0 6 6 6 12	5 3 4 4 3 19
THIRD QUA					
MAT 103 ENG 102 MEC 201 PHY 112	Technical Mathematics III Composition Manufacturing Processes I Physics — Materials and Heat	5 3 1 3 12	0 0 0 2 	0 0 6 0 6	5 3 4 — 15
FOURTH Q	UARTER				
MEC 104 MEC 235 CHM 101 MEC 180	Applied Mechanics Fluid Power Chemistry Programming for Manufacturing	5 3 4 3 15	0 0 2 0 -	0 3 0 3 -6	5 4 5 4 18
FIFTH QUA					
PHY 113 MEC 205 MEC 202 MEC 210	Physics — Electricity Strength of Materials Manufacturing Processes II Ferrous Metallurgy	3 3 2 3 	2 2 0 0 -4	0 0 6 3 9	4 4 4 4 ——————————————————————————————
SIXTH QUA	ARTER				
PSY 206 ISC 202 MEC 237 ISC 201 ISC 203	Applied Psychology Quality Control Control Systems Industrial Organization and Management Motion and Time Study	3 3 3 3 3 ————————————————————————————	0 2 2 0 2 	0 0 0 0 0 0 0 0 0	3 4 4 3 4 — 18
SEVENTH	QUARTER				
ISC 209 ENG 103 MEC 203 MEC 240 ECO 102	Plant Layout Technical Report Writing Welding Processes Introduction to Robotics Economics I	3 2 3 3 	2 0 0 2 0 4	0 0 3 0 0 	4 3 3 4 3 17

C - Class

L - Lab

P - Practicum

QH - Quarter Hours Credit

MARKETING AND RETAILING T-020

Marketing and Retailing is a program which teaches students the techniques of marketing, management, and distribution which are used in many businesses. This program is designed to give the student a chance to learn the theoretical, as well as practical aspects of occupations at the mid-management level. Retailing occupations are those followed by workers engaged in marketing or merchandising activities or in contact with buyers and sellers when (1) distributing to consumers, retailers, jobbers, wholesalers, and others the products of farm and industry or selling devices, or (2) managing, operating, or conducting retail, wholesale, or service businesses. Distribution pertains to business and consumer services. Occupations are many and diverse, ranging from stock clerk to the head of a giant distribution-oriented corporation. Thus, there are hundreds of entry occupations in this field.

Total credit hours: 108 - 109

Course Tit	le		rs Per		
FIRST QUA	ARTER	С	L	Р	QH
ENG 100 BUS 102 BUS 109 ECO 102 BUS 115	Oral Communication Typewriting I Business Mathematics Economics I Business Law I	3 2 5 3 3	0 0 0 0 0	0 3 0 0 0 0	3 3 5 3
SECOND C	QUARTER	10	Ü	3	17
ENG 101 BUS 120 ECO 104 BUS 116 PSY 112	Introduction to Written Communication Accounting I Economics II Business Law II Personality Development	3 4 3 3	0 0 0 0	0 3 0 0	3 5 3 3
THIRD QUA	ARTER	16	0	3	17
ENG 102 EDP 101 ECO 108 BUS 232 PSY 206	Composition Principles of Business Data Processing Consumer Economics Sales Development Applied Psychology	3 3 3 3	0 2 0 0	0 0 0 0	3 4 3 3
FOURTH Q	UARTER	15	2	0	16
BUS 239 BUS 110 ENG 206 BUS 234	Marketing Office Machines Business Communications Advanced Sales	2 2 3 3 —	0 0 0 0	3 0 0 	3 3 3

FIFTH QUAI	RTER				
ENG 205	Business Report Writing	3	0	0	3
BUS 245	Retailing	5	0	0	5
BUS 244	Marketing Research	4	2	0	5
BUS 272	Principles of Supervision	3	0	0	3
,		15	2	0	16
SIXTH QUA	RTER				
BUS 246	Public Relations	3	0	0	3
BUS 242	Display and Design	3	2	0	4
BUS 243	Advertising	4	0	0	4
BUS 262	Fashion Merchandising	3	2	0	4
BUS 237	Wholesaling	3	0	0	3
		16	4	0	18
SEVENTH C	UARTER				
BUS 241	Social Stratification	3	0	0	3
BUS 249	Marketing/Retailing Seminar or				
	6 hrs of BUS Elective	5	0	20	7
	Elective	3	0	0	3
		11	0	20	13
C - Class		11	J	2.0	13
0,000					

L - Lab



MECHANICAL DRAFTING AND DESIGN ENGINEERING TECHNOLOGY T-043

Drafting is the language of industrial production, and draftsmen and designers are the language experts in this field. The technical draftsman is responsible for the design and graphical representation of the processes and materials of production. Individuals employed in this field are expected to use creative imagination in the design of tools, machines, and machine parts which will facilitate production of goods. This rapidly expanding field offers opportunities which compare favorably with those in any other technical area.

The Drafting and Design program provides the students with an extensive background in the fundamentals of drafting and an understanding of the application of these principles to the design of machines, tools, dies, fixtures, cams, and gears. Virtually unknown ten years age, CAD (computer-aided design) is changing every aspect of design and drafting. Forsyth Technical Institute is a forerunner in providing the opportunity to the students to use a CAD system. The course also provides a knowledge of manufactured products and valuable information for those interested in selling metal products. Emphasis is placed upon the ability to think and plan and not merely upon drafting techniques. This is an ABET accredited program.

Total credit hours: 121



Course Titl	Course Title		Hours Per Week					
FIRST QUA	RTER	С	L	Р	QH			
DFT 101 MAT 101 MEC 101 ENG 101 DFT 151	Technical Drafting I Technical Mathematics I Machine Processes I Introduction to Written Communication Computer Graphics	2 5 1 3 2 	0 0 0 0 0 0	6 0 6 0 0 -	4 5 3 2 -			

SECOND	QUARTER				
DFT 10. MAT 10. MEC 10. PHY 11 ENG 10.	 Technical Mathematics II Machine Processes II Physics — Mechanics Composition 	2 5 1 3 3 14	0 0 0 2 0 	6 0 6 0 0 12	4 5 3 4 3 19
THIRD Q					
DFT 103 MAT 103 PHY 113 ENG 103 MEC 20	Technical Mathematics III Physics — Materials and Heat Technical Report Writing	2 5 3 1 -1	0 0 2 0 0 	6 0 0 0 6 	4 5 4 3 3 19
FOURTH	QUARTER				
DFT 209 DFT 260 MEC 104 MEC 210 MEC 239	Dimensioning and Tolerancing Applied Mechanics Ferrous Metallurgy	2 1 5 3 3	0 0 0 0 0	6 3 0 3 3	4 2 5 4 4
FIFTH QU	JARTER	14	0	15	19
DFT 204 DFT 206 MEC 205 PHY 113	Descriptive Geometry Design Drafting II Strength of Materials	3 2 3 3 -	0 0 2 2 	3 6 0 0 -	4 4 4 4
SIXTH QI	UARTER	11	4	9	16
DFT 223 DFT 211 ENG 100 MEC 233	1 Mechanisms 0 Oral Communication	3 3 3	0 0 0 2	6 3 0 0	5 4 3 4
SEVENTA	H QUARTER	12	2	9	16
DFT 212 DFT 222 PSY 206 ISC 200 DFT 225 C-Class	2 Jig and Fixture Design 4 Product Design 6 Applied Psychology 1 Industrial Organization and Management	3 1 3 3 1 1	0 0 0 0 0 0	6 3 0 0 3 12	5 2 3 3 2 15

L - Lab

P - Practicum

NUCLEAR MEDICINE TECHNOLOGY T-104

Nuclear Mecicine is the discipline concerned with the diagnoisis, treatment, and clinical investigation of disease, utilizing internally administered radionuclides and sophisticated electronic detection equipment.

The student learns to perform clinical nuclear medicine procedures and is provided with the background in physics, anatomy, physiology, mathematics, radiobiology, instrumentation, electronics, and radiopharmacy that is essential to the performance of superior quality work.

North Carolina Baptist Hospital and Forsyth Memorial Hospital will provide the clinical experience for degree requirements.

Total credit hours: 136

Cour	se Title	е	Hou	ırs Pe	r Weel	QH
FIRS	T QUA	RTER	C	_	CP	αп
BIO CHM MAT ENG BIO SOC NMT NMT SAF	107 103 113 100 115 020 105 115 3005	Anatomy and Physiology I Chemistry—General and Inorganic Allied Health Mathematics I Oral Communication Medical Terminology I Academic Survival Skills Nuclear Medicine Technology I Orientation to Clinical Nuclear Medicine Cardiopulmonary Resuscitation*	3 3 3 1 2 2 0	2 2 0 0 0 0 0 2 0	0 0 0 0 0 0 0 0	4 4 3 3 1 0 2 2
SECO	OND Q	UARTER	17	6	3	19
BIO ENG MAT PHY BIO NMT NMT	108 101 114 100 116 106 119	Anatomy and Physiology II Introduction to Written Communication Allied Health Mathematics II Introduction to Physics Medical Terminology II Nuclear Medicine Technology II Introduction to Clinical Practice I	3 3 3 1 2 0 15	2 0 0 0 0 0 2 4	0 0 0 0 0 6 6	4 3 3 1 2 3 19
ENG PHY PSY NMT NMT NMT	102 102 169 107 116 124	Composition Electricity and Electronics Social Psychology of Health and Illness Nuclear Medicine Technology III Nuclear Physics Introduction to Clinical Practice II	3 3 2 2 0	0 0 0 2 0 0	0 0 0 0 0 12	3 3 3 2 4
FOUF	RTH QU	JARTER	13	2	12	18
MAT NMT NMT NMT	116 108 213 201	Fundamental Concepts of Statistics Nuclear Medicine Technology IV Principles of Nuclear Pharmacy (202, 203, or 204) Clinical Practice	5 3 3 0 11	0 0 0 0 0	0 0 0 21 	5 3 7 18

FIFTH	H QUA	RTER				
NMT NMT NMT NMT	111 220 225 202	Principles of Nuclear Medicine I Instrumentation I Computers in Nuclear Medicine (201, 203, or 204) Clinical Practice	2 2 3 0 7	0 0 0 0 -	0 0 0 21 	2 2 3 7 14
SIXTI	H QUA	RTER				
NMT NMT NMT NMT NMT	117 221 235 251 203	Health Physics Principles of Nuclear Medicine II Instrumentation II Principles of In Vitro Nuclear Medicine I (201, 202, or 204) Clinical Practice	1 2 2 2 0	0 0 2 2 0 4	0 0 0 0 21 	1 2 3 3 7 16
SEVE	NTH C	QUARTER	,		- '	
NMT NMT NMT NMT SOC	231 245 289 204 103	Principles of Nuclear Medicine III Instrumentation III Radiobiology (201, 202, or 203) Clinical Practice Sociology	2 2 2 0 3 9	0 2 0 0 0 0 -	0 0 0 21 0 	2 3 2 7 3 17
EIGH	TH QU	ARTER				
NMT NMT NMT NMT PSY	258 290 292 300 206	Principles of In Vitro Nuclear Medicine II Nuclear Medicine Technology Seminar Nuclear Medicine Technology Review Clinical Practice Review Applied Psychology	2 2 2 0 3 9	2 0 0 0 0 -	0 0 0 15 0	3 2 2 5 3

*CPR certification by the American Heart Association is required for graduation. Each student must document valid certification during the first quarter and maintain valid certification throughout the program.

C - Class L - Lab

CP - Clinical Practice



ORNAMENTAL HORTICULTURE T-009

The modern emphasis on outdoor living has created a greater interest in the use of ornamental plants in today's beauty-conscious society. The increased awareness of the value of ornamental plants in landscaping by government, industry, and homeowners has produced a greater demand for trained horticulture technicians.

The Ornamental Horticulture program is designed to give students a good understanding of principles, techniques, and skills which are a necessary foundation for the independent, creative thinking essential to success in this field. Successful completion of this program should qualify individuals for employment in supervision of nurseries and plantings, greenhouse operation, work related to processing and distribution, management of garden shops, supervision or maintenance of golf courses, and sale of horticulture products.

Total credit hours: 118



CURRICULUM BY QUARTERS

Course Titl	е	Hou	ırs Peı L	r Weel	(QH
FIRST QUA	RTER			-	αп
ENG 100 AGR 185 AGR 254 CHM 101	Oral Communication Soil Science and Fertilizer Plant Propagation Chemistry	3 5 3 4 	0 2 2 2 	0 0 0 0 0	3 6 4 5
SECOND Q					
ENG 101 AGR 259 AGR 170 AGR 150 AGR 153	Introduction to Written Communication Garden Center Management Plant Science House Plants Greenhouse Management	3 1 4 3 3 14	0 2 2 0 2 6	0 0 0 0 0 -	3 2 5 3 4 17
ENG 102	Composition	2	0	0	2
AGR 140 AGR 201 AGR 151 AGR 180	Home Maintenance Agricultural Chemicals Plant Materials I Bedding Plant Production	3 2 3 3 2 	0 4 0 4 2 	0 0 0 0 0 -	3 4 3 5 3
FOURTH Q	UARTER	, 0			
ENG 103 AGR 256 AGR 240 AGR 152	Technical Report Writing Nursery Management I Landscape Construction I Plant Materials II	3 2 4 3 	0 4 2 4 10	0 0 0 0 	3 4 5 5
FIFTH QUA	RTER	. –			
AGR 145 AGR 241 AGR 251 AGR 258	Entomology and Pathology Landscape Construction II Landscape Gardening I Turf Practices	4 4 3 3 	2 4 2 	0 0 0 0 -	5 5 4 —
SIXTH QUA	RTER				
AGR 257 AGR 252 BUS 109 BUS 190	Nursery Management II Landscape Gardening II Business Mathematics Horticultural Business Management	2 3 5 3 	4 4 0 0 	0 0 0 0 	4 5 5 3 17
SEVENTH (QUARTER	.0	0	Ü	.,
AGR 200 AGR 210 AGR 220 C - Class	Practicum Field Analysis Vegetable and Flower Gardening	0 5 4 - 9	0 0 0 -	30 0 0 	3 5 4

L - Lab

P - Practicum

POLICE SCIENCE TECHNOLOGY T-064

Police agencies today are moving toward a professional status, and law enforcement techniques have evolved from simple jobs requiring minimal qualifications to highly complex activities requiring a great capacity for highly specialized knowledge.

Police officers, both men and women, are charged with the responsibility of protecting life and property. Their responsibilities include preserving the peace, preventing criminal acts, enforcing the law, and apprehending the offenders.

Many opportunities are available for qualified individuals to enter police work. However, future opportunities may be determined to a greater degree by technological and scientific changes in the ever widening scope of law enforcement services.

The Police Science Technology program is designed to instruct the student in current law enforcement methods and in the behavioral sciences. It also provides a firm base of general education including biology, mathematics, and language skills in developing proficiency in leadership necessary for employment at the operational or management level.

Total credit hours: 111



CURRICULUM BY QUARTERS

Course Title		Houi	s Per	Week	
FIRST QUART	TER	C	L	P	QH
	Oral Communication	3	0	0	3
PSC 101 Ir	ntroduction to Law Enforcement	5	0	0	5
	Criminology	5	0	0	5
SOC 102 P	Principles of Sociology	5	0	0	5
		18	0	0	18
SECOND QUA	ARTER				
	ntroduction to Written Communication	3	0	0	3
	Government—National	5	0	0	5
	Police Organization — Administration	5	0	0	5
SOC 209 S	Social Problems	3	0	0	3
		16	0	0	16
THIRD QUART					
	Composition	3	0	0	3
	Government—State and Local	5 4	0	0	5
	Administration of Justice General Biology I	3	0 2	0	4
DIO 101 G	defleral blology i		******	_	
FOURTH QUA	DIED	15	2	0	16
		0	_	40	
	Police Science: Seminar and Practicum	3 5	0	10	4 5
	Police Role in Crime and Delinquency General Biology II	3	2	0	4
DIO 102 C	acheral blology if			_	
FIFTH QUART	TED.	11	2	10	13
		_	^	0	_
	General Psychology Fundamental Concepts of Mathematics	5 3	0	0	5 3
	Criminal Law I	5	0	0	5
	ntroduction to Philosophy	3	0	0	3
	,	16	0	0	16
SIXTH QUART	TEB	10	U	0	10
	echnical Report Writing	3	0	0	3
	Criminal Law II	5	0	0	5
PSC 210 C	Priminalistics I	3	2	0	4
SOC 210 N	Minorities in American Society	3	0	0	3
		14	2	0	15
SEVENTH QU	ARTER				
	appreciation of Literature	3	0	0	3
PSY 108 A	bnormal Psychology	5	0	0	5
	Criminalistics II	3	2	0	4
MAT 116 F	undamental Concepts of Statistics	5	0	0	5
		16	2	0	17
C - Class					

C - Class

L - Lab

P - Practicum

RADIOLOGIC TECHNOLOGY T-061

Radiologic Technology entails the use of x-ray and other forms of ionizing radiation for diagnosis and treatment of injury and disease.

The student becomes proficient in the operation of radiographic equipment and gains a thorough knowledge of accessories and photographic principles to produce high quality radiographs. Emphasis is placed upon the positioning of various body parts, technical factors to minimize radiation exposure, pathological conditions, and specialized procedures employed for diagnosis. There is detailed analysis of radiographs for proper positioning, anatomical structure visualization, the use of appropriate accessories, and technical exposure factors.

This knowledge is applied as a planned learning experience under the supervision of staff technologists and clinical instructors at North Carolina Baptist Hospital and Forsyth Memorial Hospital.

After satisfactory completion of the program, the student is eligible for examination by the American Registry of Radiologic Technologists.

Total credit hours: 146

Course Titl	Hou	rs Pei	Week	QH	
FIRST QUA	RTER		_	-	G.II
BIO 107 CHM 103 ENG 100 MAT 113 BIO 115 RDT 113	Anatomy and Physiology I Chemistry—General and Inorganic Oral Communication Allied Health Mathematics I Medical Terminology I Departmental Orientation and Ethics and	3 3 3 1	2 2 0 0 0	0 0 0 0	4 4 3 3 1
	Elementary Radiation Protection	1 14	<u>0</u> 4	3 3	2 17
SECOND Q	UARTER				
PHY 105 SAF 3005 BIO 108 ENG 101 MAT 114 BIO 116 RDT 114	General Physics I Cardiopulmonary Resuscitation (CPR)* Anatomy and Physiology II Introduction to Written Communication Allied Health Mathematics II Medical Terminology II Basic Essentials of Radiologic Technology	4 0 3 3 1 3	0 0 2 0 0 0	0 0 0 0 0 0	4 0 4 3 3 1 7
THIRD QUA	ARTER	17	2	12	22
BIO 169 PSY 169 BIO 139 PHY 106 RDT 139 RDT 138	Fundamentals of Disease Processes Social Psychology of Health and Illness Topographical Anatomy General Physics II Positioning and Related Anatomy I Practicum I	4 3 2 4 3 0	0 0 0 0 0 2 -	0 0 0 0 0 15	4 3 2 4 3 6
FOURTH Q	UARTER	16	2	15	22
RDT 259 RDT 125 RDT 137 RDT 238	Positioning and Related Anatomy II Radiographic Darkroom Radiographic Technique I Practicum II	3 2 3 0 8	0 0 0 2 -	0 0 0 24 	3 2 3 9

FIFTI	H QUA	RTER				
RDT RDT RDT RDT RDT RDT	216 237 261 248	Film Critique I Positioning and Related Anatomy III Radiation Physics Radiographic Technique II Pediatric and Operating Room Radiography Practicum III	1 3 3 1 0 11	0 0 0 0 0 2 	0 0 0 0 0 21 	1 3 3 3 1 8 19
SIXT	H QUA	RTER				
RDT RDT RDT RDT	249 258	Film Critique II Positioning and Related Anatomy IV Radiation Protection Practicum IV	2 3 1 0 6	0 0 0 4 -4	0 0 0 24 24	2 3 1 10
		QUARTER				
RDT RDT RDT RDT RDT RDT	291 283 233 250 205 268	Film Critique III Radiographic Pathology Seminar I Special Procedures I Nuclear Medicine and Radiation Therapy Practicum V	2 1 2 1 0 8	0 0 0 0 0 2 	0 0 0 0 0 24 	2 1 2 1 9
EIGH	TH QU	ARTER				
RDT RDT RDT RDT RDT	292 257 234 252 278	Film Critique IV Departmental Administration Seminar II Special Procedures II Practicum VI	2 1 1 2 0 6	0 0 0 0 4 -4	0 0 0 0 24 	2 1 1 2 10

C - Class

L - Lab

CE - Clinical Experience

QH - Quarter Hours Credit

*CPR required for graduation. The CPR course may be taken any time during the first two quarters. However, current certification must be maintained for the duration of the program.



REAL ESTATE T-127

Real estate, a major business activity in North Carolina, is much broader and more complex than is commonly realized.

The field of real estate involves helping people find satisfactory homes and helping industry find profitable locations; it includes the planning and developing necessary to make the highest and best use of land and buildings. Other aspects of the industry include the appraising and the managing of real property and finding capital for construction and rehabilitation.

The man or woman entering the real estate industry will be involved in rendering a wide variety of fundamental services to meet the growing housing demands of business and industry. Trained men and women are needed to assist in locating families, locating factories and offices, financing real estate transactions, managing commercial buildings and multiple dwellings, and appraising real property. The real estate industry offers an opportunity for personal achievement as well as the satisfaction of doing work of the highest importance in the community.

Total credit hours: 115



Course Title		Hou	rs Per	Week	
FIRST QUA	RTER	С	L	Р	QH
ENG 101	Introduction to Written Communication	3	0	0	3
BUS 162	Fundamentals of Real Estate I	5	0	0	5
BUS 101	Introduction to Business	5	0	0	5
BUS 109	Business Mathematics	5	0	0	5
		18	0	0	18

SECOND QUARTER				
ENG 102 Composition BUS 163 Fundamentals of Real Estate II ECO 102 Economics I BUS 120 Accounting I THIRD QUARTER	3 5 3 4 	0 0 0 0 -	0 0 0 3 -3	3 5 3 5 16
ENG 100 Oral Communication ECO 104 Economics II BUS 121 Accounting II CIV 105 Architectural Materials and Methods	3 4 3 	0 0 0 2 -	0 0 3 0 	3 5 4 —
FOURTH QUARTER	13	~	3	13
BUS 239 Marketing BUS 164 Real Estate Law BUS 292 Appraisal I Elective*	5 5 3 3 16	0 0 0 0	0 0 0 0 -	5 3 3 -1
FIFTH QUARTER	10	O	0	10
BUS 293 Appraisal II BUS 209 Real Estate Finance PSY 206 Applied Psychology BUS 216 Real Estate Sales Elective*	3 5 3 3 —	2 0 0 0 0 0	0 0 0 0 0 0 0	4 5 3 3 3
SIXTH QUARTER	17	~	O	10
ENG 206 Business Communications BUS 294 Appraisal III BUS 296 Property Management BUS 228 Real Estate Investment and Taxation BUS 247 Business Insurance	3 3 3 3 	0 2 0 0 0 0	0 0 0 0 0 0	3 4 3 3 3 —
SEVENTH QUARTER	15	۵	O	10
BUS 236 Land Development BUS 231 Real Estate Merchandising BUS 238 Land Use Policy & Governmental	3	2	0	4 3
Influences on Real Estate BUS 235 Business Management	3 5 14	2 0 4	0 0 	4 5 - 16

C - Class

L - Lab

P - Practicum

^{*}Unspecified electives may be any course in any associate degree program provided student meets prerequisites.

RESPIRATORY THERAPY TECHNOLOGY — THERAPIST T-091

Respiratory therapy is an allied health specialty employed with medical direction in the treatment, management, control, and diagnostic evaluation and care of patients with deficiencies and abnormalities with the cardiopulmonary system.

Respiratory therapy shall mean the therapeutic use of the following: medical gases and administration apparatus, environmental control systems, humidification, aerosols, medications, ventilatory support, bronchopulmonary drainage, pulmonary rehabilitation, cardiopulmonary resuscitation, and airway management.

Specific testing techniques are employed in respiratory therapy to assist in diagnosis, monitoring, treatment, and research. This shall be understood to include measurement of ventilatory volumes, pressures, flows, blood gas analysis, and other related physiologic monitoring.

Successful completion of the respiratory therapist program qualifies one to sit the National Board for Respiratory Therapy entry level examination. Passing the entry level exam plus one year post graduate work experience makes one eligible to sit the national registry examination for registered respiratory therapist (RRT).

Total credit hours: 122



Course Title	e		s Pe	r Week	011
FIRST QUA	RTER	С	L	CE	QH
BIO 107	Anatomy and Physiology I	3	2	0	4
ENG 100	Oral Communication	3	0	0	3
CHM 103	Chemistry — General and Inorganic	3	2	0	4
BIO 115	Medical Terminology I	1	0	0	1
PHY 101	Concepts in Physics	3	0	0	3
MAT 113	Allied Health Mathematics I	3	0	0	3
		16	4	0	18

SECO	OND Q	UARTER				
ENG BIO BIO RTH RTH RTH	101 108 116 105 111 287	Introduction to Written Communication Anatomy & Physiology II Medical Terminology II Theories and Principles I Clinical Experience I Respiratory Therapy Pharmacology	3 3 1 4 0 1 12	0 2 0 2 0 0 0	0 0 0 0 9 0	3 4 1 5 3 1 7
	D QUA					
BIO RTH RTH RTH SAF		Microbiology Cardiopulmonary Anatomy & Physiology Pulmonary Diseases Clinical Experience II Cardiopulmonary Resuscitation (CPR)*	3 4 0 0 10	2 0 0 0 0 	0 0 0 18 0 	4 3 4 6 0
FOUF	RTH QI	JARTER				
RTH RTH ENG RTH MAT HEA	233 269 102 123 114 149	Chest Physiotherapy Cardiopulmonary Pathophysiology Composition Clinical Experience III Allied Health Mathematics II General Pharmacology	1 4 3 0 3 3 	2 0 0 0 0 0 0	0 0 9 0 0 9	2 4 3 3 3 3 18
FIFTH	H QUA	RTER				
CHM SOC RTH RTH RTH	104 103 250 218 215	Organic & Biochemistry Sociology Intensive Respiratory Care Clinical Experience IV Ventilators	3 3 0 2 11	2 0 0 0 2 4	0 0 0 18 0 	4 3 3 6 3 19
SIXT	H QUA	RTER	11	4	10	19
ENG PSY RTH RTH RTH	103 101 211 228 268	Technical Report Writing Psychology Pediatrics Clinical Experience V Pulmonary Function	3 2 0 3 	0 0 0 0 0	0 0 0 18 0 	3 2 6 3 17
SEVE	NTH C	QUARTER	11	U	10	17
RTH RTH RTH	257 238 241	Respiratory & Hemodynamic Monitoring Techniques Clinical Experience VI	3	0	0 33	3 11
nin	241	Respiratory Therapy Department Operations	<u>2</u> 5	0 0	<u>0</u> 33	2 16

*CPR required for graduation. The American Heart Association CPR course may be taken any time during the first three quarters. Current certification must be maintained for the duration of the program.

C - Class

L - Lab

CE - Clinical Experience

ELECTIVES

In order to broaden the educational experience, most of the Associate in Applied Science degree programs provide for elective subjects as part of the degree requirements.

Electives are to be selected by the student and his advisor. These elective courses should be consistent with the student's educational needs, interests, and goals. General electives may be chosen from any technical program courses for which the student meets prerequisites. Specified electives should be chosen from courses available within the curriculum department or division.

In the Business Department, for example, business electives may be selected from courses with BUS, ECO, EDP, AIB, and ISC course numbers. The course descriptions are listed in alphabetical order in the back of this catalog. Listings or suggestions for appropriate courses are also available from the advisors or Admissions and Counseling offices in Student Services.







PRE-TECHNICAL PROGRAM



PRE-TECHNICAL PROGRAM

The Pre-Technical program provides a student with an opportunity to build academic skills and acquire the background which should facilitate entrance into his/her desired curriculum program.

For an applicant to a degree program who, on the basis of test results and past performance, does not qualify for immediate admission to his/her chosen program of study, non-credit developmental course work is available and may be required as a condition of admission to the program.

A student may then transfer into his/her curriculum program when the criteria have been met and pre-technical and selected curriculum courses have been completed. All credit courses within the student's chosen curriculum will then be applied toward graduation.

Some developmental courses are also open to students who wish to take them for personal benefit.

PRE-TECHNICAL PROGRAM T-099

This program is a full-time course of study which offers preparation, remediation, and guidance for students who, for a variety of reasons, do not meet the specific entrance requirements for the regular curriculum programs of their choice. Students who do meet the minimum entrance requirements but whose previous academic records indicate that they may have difficulty in successfully completing their programs are also advised to enter the Pre-Technical program.

The student's academic program will be individually designed to meet his specific preparatory and remedial needs. The courses will be selected from the Pre-Technical offerings and from technical and/or vocational credit courses.

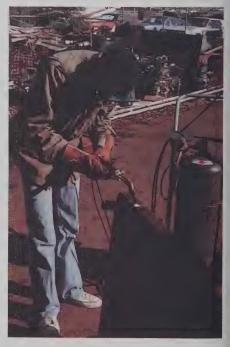
PRE-TECHNICAL COURSE OFFERINGS

Course Title		Hou	s Per	Wee	k
		С	L	Р	QH*
FIRST QUA	RTER				
BIO 010	Human Anatomy	3	0	0	0(3)
BUS 010	Pre-Technical Accounting	5	0	0	0(5)
BUS 030	Introduction to Shorthand	5	0	0	0(5)
CHM 010	Pre-Technical Chemistry	3	2	0	0(4)
ENG 001	Spelling	3	0	0	0(3)
ENG 005	Language Development I	2	2	0	0(3)
ENG 006	Language Development II	2	2	0	0(3)
ENG 007	Language Development III	2	2	0	0(3)
ENG 008	Language Development IV	2	2	0	0(3)
ENG 010	Basic Writing Skills	5	0	0	0(5)
ENG 021	Basic Reading Skills and Vocabulary I	3	0	0	0(3)
ENG 022	Basic Reading Skills and Vocabulary II	3	0	0	0(3)
ENG 023	Basic Reading Skills III	3	0	0	0(3)
MAT 001	Structure of Arithmetic	5	0	0	0(5)
MAT 002	Pre-Business Math	5	0	0	0(5)
MAT 003	Algebra	5	0	0	0(5)
MAT 004	Pre-Technical Mathematics	5	0	0	0(5)
MAT 005	Geometry	5	0	0	0(5)
MAT 020	Mathematics for Health Education	3	0	0	0(3)
NUT 001	Basic Nutrition	3	0	0	0(3)
PHY 001	Pre-Technical Physics	3	2	0	0(4)
SOC 010	Study Skills	3	0	0	0(3)
SOC 020	Academic Survival Skills	2	0	0	0(2)
SOC 100	Sociology I	0	4	0	2
SOC 101	Sociology II	0	4	0	2

^{*}Equivalent credit hours shown in parentheses.







VOCATIONAL DIPLOMA PROGRAM

VOCATIONAL DIPLOMA PROGRAM

The diploma curricula are practical in nature and are designed to prepare the student for immediate employment opportunities in a skilled trade. All curricula are designed for one year or four consecutive quarters of intensive study. (Evening curricula require approximately two years.) Upon completion, the graduate is awarded the State Vocational Diploma. The vocational courses, forming each diploma curriculum, are not designed for transfer to Associate (or higher) degree levels of instruction.

Sample Course Listing

С			L	P			QH
DFT	1121 D	rafting I		4 0	12	8	
Course Prefix	Course Number	Course Title	Classroom Hours per week	Laboratory Hours per week	Practicum per week (Practical application or clinical experience per week.)		Quarter Hours Credit

Contact Hours per week





AIR CONDITIONING, REFRIGERATION, AND HEATING V-024

During 1972, statewide licensing became mandatory for all installation and major servicing of domestic central heating and cooling systems. A state license is now required for installers of most commercial refrigeration equipment. These and other stricter regulations are dramatic proof of the expanding activity and complexity in this field. It is reasonable to conclude, therefore, that a licensed service man is commanding higher pay and better opportunity compared to an unlicensed worker. This program, besides preparing a graduate to take the state board examination, enables him to find immediate employment in a wide choice of jobs, which include apartment maintenance, industrial maintenance, commercial refrigeration, domestic appliances and servicing, sales engineering, self-employment, and—thanks to the growing number of cars with factory-installed air conditioners—the automotive field.

Total credit hours: 81



CURRICULUM BY QUARTERS

Course	Course Title			Hours Per Week C L P QH			
FIRST	QUARTER		L.		GH		
WLD MAT	 1102 Fundamentals of Refrigeration 1111 Air Conditioning Welding 1102 Algebra 1103 Fundamentals of Electricity 	7 1 5 3 —	0 0 0 2 -	9 3 0 0 	10 2 5 4 —		
SECO	ND QUARTER						
ELC DFT	 1103 Domestic and Commercial Refrigeration 1111 Applied Electricity II 1107 Blueprint Reading 1101 Communications I 	6 3 1 3 —	0 2 0 0 -	12 0 3 0 	10 4 2 3 		
THIRD	QUARTER	,,,	-	,,,	10		
AHR ENG	 1104 Air Conditioning Controls I 1105 Principles of Air Conditioning 1112 Communications II 1116 Solar Energy Conversion Systems 	5 3 3 — 16	0 0 0 2 -	3 9 0 0 	6 8 3 4 		
FOUR ¹	TH QUARTER						
HET PSY	 1106 Air Conditioning Controls II 1101 Heating Systems 1101 Human Relations 1103 Small Business Operations 	3 6 3 3 15	0 0 0 0 -	0 15 0 0 	3 11 3 3 		

C - Class

L - Lab

P - Practicum

AUTOMOTIVE BODY REPAIR V-001

Graduates of this program are qualified for jobs in which they remove dents in car and truck bodies and fenders; remove and replace various sheet metal parts; straighten frames, doors, hoods, and deck lids; operate four kinds of welding equipment; shrink stretched metal and prepare it for painting; paint fenders and panels as well as a complete vehicle, with any of a number of paints and thinners. At the same time, the student is taught to interpret blueprints, charts, service manuals, and wiring diagrams. Preparation of repair orders and making estimates and statements for adjustors is also covered. Much of the student's time in the shop is spent learning skills and practicing them under circumstances that closely match those met on the job. After gaining experience, many graduates open their own businesses or become body shop foremen, supervisors, or managers.

Total credit hours: 65



Course Title				rs Per L	Week	QH
FIRS1	CQUAI	RTER	С	-	,	GII
MAT ENG	1101 1101	Automotive Body Repair I Fundamentals of Mathematics Communications I Applied Basic Arc and Gas Welding	3 5 3 1 	0 0 0 0 0 0	12 0 0 6 	7 5 3 3 — 18
SECC	ND QI	UARTER				
WLD	1105 1101	Automotive Body Repair II Introduction to Shielded Metal Arc Welding Applied Science I Communications II	3 1 3 3 	0 0 2 0 2	15 3 0 0 	8 2 4 3 — 17
THIR	D QUA	RTER				
AUT PSY WLD AUT	1101 1131	Metal Finishing and Painting Human Relations Applied Inert Gas Welding Frame Straightening and Alignment	2 3 2 2 -	0 0 0 0 -	12 0 3 6 	6 3 3 4 — 16
FOUF	RTH QI	UARTER				
BUS DFT AUT	1101	Small Business Operations Schematics and Diagrams Auto and Truck Painting	3 0 3 -6	0 0 0 0	0 3 21 24	3 1 10 — 14

C - Class

L - Lab

P - Practicum

AUTOMOTIVE MECHANICS V-003

The Automotive Mechanics curriculum is designed to take the student without any automotive experience and teach the many skills used in servicing and repairing automobiles. The student is taught, in each phase of the auto program, the construction, purpose, and detail operation of each component so that the student will attain a better understanding of how to service and repair these components. Also taught is the operation of equipment that will be used in the service field. By using automobiles and proper equipment, the student deals with the actual problems encountered when servicing automobiles for the public.



Course Title		urs Pe		•
FIRST QUARTER	С	L	Р	QH
PME 1101 Internal Combustion Engines PME 1103 Automobile Fuel Systems BUS 1103 Small Business Operations MAT 1101 Fundamentals of Mathematics	4 1 3 5	0 0 0 0	15 3 0 0	9 2 3 5
SECOND QUARTER	13	0	18	19
AUT 1123 Automotive Chassis and Suspension Systems WLD 1101 Basic Gas and Arc Welding ENG 1101 Communications I PHY 1101 Applied Science I	4 1 3 3 	0 0 0 2 2	15 3 0 0 - 18	9 2 3 4
THIRD QUARTER	' '	۷	10	10
PME 1102 Automotive Electrical Systems AHR 1101 Automotive Air Conditioning ENG 1112 Communications II MEC 1112 Machine Shop Processes	4 2 3 1 10	0 0 0 0 	15 3 0 3 	9 3 3 2 —
FOURTH QUARTER				
AUT 1124 Automotive Power Trains AUT 1125 Automotive Servicing PSY 1101 Human Relations DFT 1101 Schematics and Diagrams	3 3 0 9	0 0 0 0 -	9 9 0 3 	6 6 3 1 16

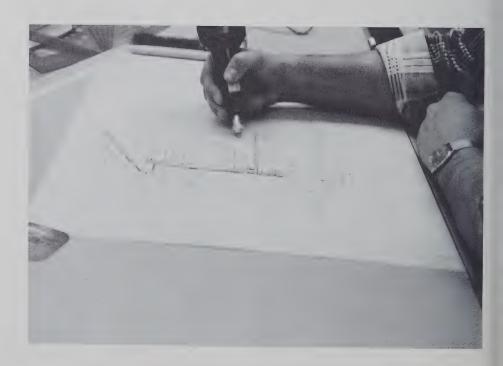
C - Class

L - Lab

P - Practicum

BUILDING TRADES DRAFTING V-015

This program prepares individuals to do drafting for the building industry. Courses are arranged in sequence to develop drafting skills and proficiency in mathematics and science. Emphasis is on gaining experience with actual problems rather than hypothetical ones. The building trades draftsman performs the general duties of a draftsman and specializes in organizing and making detail and working drawings of structures and mechanical equipment from preliminary sketches of the designer. He uses knowledge of various machines, engineering practices, building materials, and other physical sciences to complete the drawings.



Course Title			Week	QH
FIRST QUARTER	С	-	,	GII
DFT 1121 Drafting I MAT 1102 Algebra PHY 1101 Applied Science I DFT 1144 Building Materials and Methods	4 5 3 3 — 15	0 0 2 0 -	12 0 0 0 0 	8 5 4 3
SECOND QUARTER				
DFT 1122 Drafting II DFT 1125 Descriptive Geometry ENG 1101 Communications I MAT 1103 Geometry	4 2 3 3 12	0 0 0 0 -	12 3 0 0 	8 3 3
THIRD QUARTER		Ü	, ,	
DFT 1141 Drafting III DFT 1143 Building Mechanical Equipment MAT 1104 Trigonometry PHY 1116 Solar Energy Conversion Systems	4 3 3 3 	0 0 0 2 	15 0 0 0 	9 3 3 4
FOURTH QUARTER				
DFT 1142 Drafting IV DFT 1150 Site Planning ENG 1112 Communications II BUS 1103 Small Business Operations	4 2 3 3 	0 0 0 0 -	15 3 0 0 	9 3 3

C - Class

L - Lab

P - Practicum

CARPENTRY V-007

Carpentry is one of the basic trades in the construction industry. Using hand and power tools, carpenters construct, erect, install, and repair structures of wood, plywood, wallboard, and other materials. Students are taught to read blueprints of actual house plans, to work on foundation footings, and to do interior framing, exterior trim, and roofing. Examples of specialization are layout carpenter, framing carpenter, concrete form carpenter, scaffolding carpenter, acoustical and insulating carpenter, and finish carpenter. For every hour in the classroom, the student spends about three hours developing shop skills and working on off-campus projects.



Course Title			Hou	rs Per	Week	QH
FIRS1	QUAI	RTER			-	GII
CAR MAT DFT ENG	1101 1113 1110 1101	Framing, Sheathing, and Insulating I Carpenter's Mathematics and Estimating Blueprint Reading I Communications I	2 5 0 3 10	0 0 0 0 -	18 0 3 0 	8 5 1 3 —
SECC	ND QI	UARTER				
CAR MAT DFT PSY	1114 1111	Framing, Sheathing, and Insulating II Carpenter's Mathematics and Estimating Blueprint Reading II Human Relations	3 0 3 	0 0 0 0 -	18 0 3 0 	9 3 1 3 —
THIRD	QUA	RTER				
CAR	1114	Interior and Exterior Trim Building Codes Small Business Operations	3 3 - 9	0 0 0 -	21 0 0 	10 3 3
FOUF	RTH QU	JARTER				
CAR ENG		Finish Work Communications II	6 3 — 9	0 0 0	21 0 — 21	13 3 — 16

C - Class

L - Lab

P - Practicum

DIESEL TRUCK MAINTENANCE AND REPAIR V-013

The diesel mechanics keep bulldozers, tractors, and trucks and other diesel-powered equipment in top running order for farms and industry. Most diesel mechanics specialize in one of these kinds of diesel equipment.

The program at Forsyth Technical Institute trains students to enter the maintenance division of the trucking industry, and the scope and nature of shop work offered match closely that of the trucking industry itself. The repair and maintenance of late-model trucks and component parts obtained from industry assure the student of learning his craft on equipment similar to what he will encounter upon graduation, and his working with hand tools and reconditioning and testing equipment currently used in the trucking industry further eases his transition from instruction to industry.



Course Title	Hou	rs Pei	Week	QH
FIRST QUARTER		_		GETT
DSL 1101 Diesel Engines WLD 1101 Basic Gas and Arc Welding PHY 1101 Applied Science I ENG 1112 Communications II	4 1 3 3 	0 0 2 0 	15 3 0 0 	9 2 4 3 18
SECOND QUARTER				
DSL 1102 Diesel Electrical Systems AHR 1101 Automotive Air Conditioning MAT 1101 Fundamentals of Mathematics DFT 1101 Schematics and Diagrams	4 2 5 0 11	0 0 0 0 -	15 3 0 3 	9 3 5 1
THIRD QUARTER				
DSL 1103 Diesel Fuel Injection DSL 1104 Power Trains, Chassis, & Suspension Systems	2	0	6 15	4
ENG 1101 Communications I	3 9	0 0	0 21	3 16
FOURTH QUARTER				
DSL 1105 Diesel Servicing MEC 1120 Machine Processes BUS 1103 Small Business Operations	5 1 3 - 9	0 0 0 —	15 6 0 21	10 3 3 — 16

C - Class

L - Lab

P - Practicum

ELECTRICAL INSTALLATION V-018

The rapid development and increased use of new products, together with the expanding economy, are demanding more and better qualified workers to install and maintain electrical equipment. Through classroom, shop, laboratory instruction, and experience, a student learns the basics of motor and motor control systems, industrial electronic control systems, business procedures, and communications skills; and he will understand the National Electrical Code as it relates to wiring, electrical circuits, and the measurements of voltage, current, power and power factor of single and polyphase alternating circuits. Persons entering this program should have a strong mathematics background.



Course Title			rs Per L	Week	QH
FIRST C	QUARTER	С	L	-	QП
PHY 1	121 Electrical Installation Fundamentals103 Fundamentals of Electricity101 Fundamentals of Mathematics	5 3 5 	0 2 0 -	15 0 0 	10 4 5
SECON	D QUARTER				
DFT 1 PHY 1	 122 Residential Wiring I 110 Blueprint Reading I 102 Applied Science II 101 Communications I 	4 0 3 3 	0 0 2 0 -	15 3 0 0 	9 1 4 3
THIRD (QUARTER	10	_	10	, ,
PSY 1	 123 Residential Wiring II 101 Human Relations 113 Blueprint Reading: Electrical 112 Communications II 	5 3 0 3 11	0 0 0 0 -	15 0 3 0 	10 3 1 3
FOURTI	H QUARTER		Ŭ		
BUS 1	125 Commercial and Industrial Wiring103 Small Business Operations118 Industrial Electronics	6 3 3 12	0 0 0 -	15 0 3 — 18	11 3 4 — 18

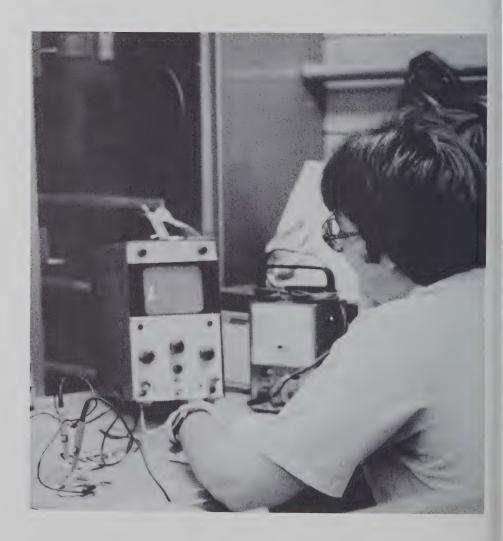
C - Class

L - Lab

P - Practicum

ELECTRONIC SERVICING V-042

The television repair program includes instruction in the basic knowledge and skills required to install, maintain, and service television receivers. Laboratory work in circuitry, schematic diagrams, and troubleshooting supplements classroom instruction and demonstration. During the final quarter, students will be involved in the servicing of color television sets. This is an approved C.E.T. course.



Course Title			Hours	Per \	Week	QH
FIRST	r QUAI	RTER		_	-	GH
MAT	1115	Direct and Alternating Current Elements of Mathematics Communications I	8 5 3 	8 0 0 	6 0 0 -	14 5 3
SECC	ND QI	JARTER			Ü	
ELN ELN ENG	1122	Solid State Devices and Circuits Transistor Theory and Circuits Communications II	6 4 3 — 13	4 4 0 	6 3 0 9	10 7 3
THIR	D QUA	RTER	10	Ü	Ü	20
ELN	1123 1104	Black and White Television Servicing Applied Science IV	10 3 	6 2 - 8	9 0 9	16 4
FOUF	RTH QU	JARTER				
ELN BUS		Color Television Servicing Small Business Operations	10 3 13	8 0 8	9 0 9	17 3 - 20

C - Class

L - Lab

P - Practicum

GRAPHIC ARTS — PRINTING V-022

Printing is the second largest industry in the United States in terms of the number of existing establishments.

Printing is carried on everywhere, all over the world. Wherever there is civilization, there is printing. The printer can be employed on a weekly newspaper in a small town, or he can work in one of the huge plants in larger cities.

Working conditions are, as a rule, good. Work, especially on the newspapers, is steady, and there are no seasonal layoffs as there are in some other industries.

This curriculum is designed to give students experience in a cluster of activities representing basic areas of the graphic arts industry. The range of experiences is sufficient to enable students to understand a variety of graphic arts processes and to develop skills enabling them to perform these processes with a high degree of efficiency. The print shop is large and well lighted, and the equipment is the most modern which can be obtained.



Course Title			r Week	QH
FIRST QUARTER	С	L	-	QП
PRN 1131 Introduction to Printing MAT 1150 Printer's Mathematics PRN 1101 Printer's English BUS 1122 Typing I	6 5 3 2 —	0 0 0 0 -	12 0 0 3 	10 5 3 3
SECOND QUARTER				
PRN 1132 Offset Printing I PHY 1114 Science for Printers PRN 1134 Composition I	4 3 3 10	0 2 0 -2	12 0 6 - 18	8 4 5 — 17
THIRD QUARTER		_		
PRN 1133 Offset Printing II PRN 1135 Composition II ENG 1101 Communications I	6 3 <u>3</u> 12	0 0 0 -	15 3 0 	11 4 3
FOURTH QUARTER				
PRN 1137 Printing Project BUS 1103 Small Business Operations ENG 1112 Communications II PRN 1136 Estimating	0 3 3 <u>5</u> 11	0 0 0 0 0	21 0 0 0 	7 3 3 5 — 18

C - Class

L - Lab

P - Practicum

MACHINIST V-032

If there is any one worker indispensable to manufacturing, it is probably the machinist, for it is he who forms into steel the idea on the engineer's blueprint. The grinding, milling, and turning of these complex parts require rare skill, and most employers want to hire only the well trained. The machinist program is both broad and detailed—broad enough to permit the graduate to fill a number of jobs in a company's machine shop, detailed enough to ensure that he understands the work fully. The demand for machinists is much greater than the supply. For the person who likes to work with his hands, where precision rules, who delights in fashioning from formless metal an engine piston, a missile part, or perhaps a surgical tool, the machinist field offers satisfaction and challenge.



Course Title			rs Per L	Week	QH
FIRST QU	ARTER	С	-	P	QП
WLD 110		3 5 0 1 3 	0 0 0 0 0	12 0 3 3 0 	7 5 1 2 3 —
SECOND	QUARTER				
MAT 110 DFT 110 ENG 110	2 Machine Shop Theory and Practice II 2 Algebra 5 Blueprint Reading: Mechanical II 1 Communications I 5 Treatment of Ferrous Metals	3 5 0 3 2 —	0 0 0 0 0	12 0 3 0 3 	7 5 1 3 3
THIRD QU	ARTER	10	Ü	10	10
DFT 110 MAT 110	Machine Shop Theory and Practice III Blueprint Reading: Mechanical III Geometry Treatment of Non-Ferrous Metals Applied Science I	3 0 3 2 3 	0 0 0 0 2 -	12 3 0 3 0 	7 1 3 3 4 — 18
FOURTH	QUARTER				
MAT 110 ENG 111	4 Machine Shop Theory and Practice IV 4 Trigonometry 2 Communications II 2 Applied Science II	4 3 3 3 — 13	0 0 0 2 -	15 0 0 0 0 -	9 3 3 4 19

C - Class

L - Lab

P - Practicum

PLUMBING V-037

Every building has a plumbing system, and each system requires plumbers not only to install it but to keep it operating. This program trains the individual to enter this field with the theoretical knowledge he needs to understand new systems, as well as old, commercial, industrial, and domestic, and the practical experience that enables him to become a journeyman in minimum time.



Course Title			Hours Per Week			
FIRS	T QUA	RTER	С	L	Р	QH
PLU DFT MAT	1131 1110 1117	Plumbing I Blueprint Reading I Plumber's Arithmetic	8 0 4 	0 0 0 —	15 3 0 - 18	13 1 4
SECC	ND QI	UARTER	12	U	10	18
PLU WLD ENG PHY	1101	Plumbing II Basic Gas and Arc Welding Communications I Applied Science I	3 1 3 3	0 0 0 2	15 3 0 0	8 2 3 4
THIRI	QUA	RTER	10	2	18	17
PLU DFT PSY		Plumbing III Drafting I: Plumbing Human Relations	5 1 3 -	0 0 0 -	18 3 0 21	11 2 3
FOUR	TH QL	JARTER	J	U	۷۱	10
PLU ENG BUS	1112	Plumbing IV Communications II Small Business Operations	3 3 3 -	0 0 0 —	21 0 0 	10 3 3 — 16

C - Class

L - Lab

P - Practicum

PRACTICAL NURSE EDUCATION V-038

The one year of study for practical nursing is offered to individuals who have completed high school and are interested in short term nursing preparation. The program prepares for giving nursing care in hospitals, homes, and long-term care facilities.

Graduates are eligible to write the Licensing Examination to become Licensed Practical Nurses.



Course	Course Title			Hours Per Week			
FIRST	QUAI	RTER	С	L	Р	QH	
PNE PNE PNE PNE	1102 1103	Fundamentals of Practical Nursing Fundamentals Lab Nutrition and Diet Therapy Anatomy and Physiology Drug Administration I Human Relations	7 0 3 4 3 3 —	0 6 0 0 0 6	0 0 0 0 0 0	7 3 3 4 3 3 	
SECO	ND QI	JARTER	20	O	U	23	
PNE		Medical-Surgical Nursing I Medical-Surgical Practicum I Drug Administration II	8 1 4 — 13	0 0 0 -	0 15 0 — 15	8 6 4 	
THIRD	QUA	RTER	10		15	10	
PNE PNE PNE ENG	1206 1108 1204 1101	Maternity Nursing Maternity Practicum (½ quarter)* Nursing of Children Pediatric Practicum (½ quarter)* Communications I Cardiopulmonary Resuscitation (CPR)**	4 1 4 (1) 3 0 12	0 0 0 0 0 0	0 15 0 (15) 0 0 0 15	4 3 4 3 0 17	
FOUR'	TH QL	JARTER					
PNE PNE	1209 1115	Medical-Surgical Nursing II Medical-Surgical Practicum II Personal and Vocational Relationships Communications II	8 1 3 	0 0 0 0 0	0 15 0 0 	8 6 3 3 20	

C - Class

L - Lab

P - Practicum

^{*}In third quarter the student will either have OB class and practicum for the first 1/2 of the quarter and Peds class and practicum the last half or vice versa. The initial courses will be prerequisite to the ones which follow.

^{**}The CPR course may be taken any time during the last two quarters.

RESPIRATORY THERAPY TECHNOLOGY — TECHNICIAN T-091

The respiratory therapy technician specializes in the technical details of general respiratory therapeutics.

The technician may assume clinical responsibility for specified respiratory care modalities involving the application of well-defined therapeutic techniques under the direct or indirect supervision of a therapist or physician.

In fulfillment of role, the technician may perform the following respiratory care modalities under direct or indirect supervision by a therapist or physician: intermittent positive pressure breathing (IPPB), humidity/aerosol therapy, including the administration of aerosolized medicants under physician prescription, medical gas therapy, pulmonary drainage procedures, and cardiopulmonary resuscitation. Further, the technician may be instructed in infection control, cleaning, sterilization, and general maintenance of respiratory therapy equipment.

Successful completion of the respiratory technician program qualifies one to sit the National Board for Respiratory Therapy entry level examination (CRTT).



Course Title				s Per L	Week	QH
FIRST	r QUAI	RTER	С	L	CE	uп
BIO ENG CHM BIO PHY MAT	101 113	Anatomy and Physiology I Oral Communication Chemistry – General and Inorganic Medical Terminology I Concepts in Physics Allied Health Mathematics I	3 3 1 3 3 	2 0 2 0 0 0 0	0 0 0 0 0 0	4 3 4 1 3
		UARTER				
ENG BIO BIO RTH RTH RTH	101 108 116 105 111 287	Introduction to Written Communication Anatomy & Physiology II Medical Terminology II Theories & Principles I Clinical Experience I Respiratory Therapy Pharmacology	3 1 4 0 1 12	0 2 0 2 0 0 4	0 0 0 9 0 9	3 4 1 5 3 1 17
THIR	D QUA	RTER				
BIO RTH RTH RTH *SAF	111 139 205 112 3005	Microbiology Cardiopulmonary Anatomy & Physiology Pulmonary Diseases Clinical Experience II Cardiopulmonary Resuscitation	3 3 4 0 0 	2 0 0 0 0 2	0 0 0 18 0 	4 3 4 6 0 17
FOUF	RTH QI	UARTER				
RTH RTH RTH	145 155 113	Theories & Principles II Critical Care Clinical Experience III	2 3 0 5	2 0 0 2	0 0 33 33	3 3 11 17

C - Class

L - Lab

P - Practicum

^{*}CPR required for graduation. The American Heart Association CPR course may be taken any time during the first three quarters. Current certification must be maintained for the duration of the program.

^{**}CPR certification by American Heart Association required for graduation.

WELDING AND METAL FABRICATION V-050

The Welding and Metal Fabrication program offered at Forsyth Technical Institute provides the student with the necessary experience in the welding and metal fabrication processes, and also broadens his technical education in such fields as blueprint reading, shop mathematics, metallurgy, and physical science. The principles of fabrication and fabrication equipment are taught in the shop each quarter along with the welding processes. Upon successful completion of the curriculum courses, the student is given the standard American Welding Society (A.W.S.) Welder Qualification Test.



Course Title		Hours Per Week				
FIRST	QUAI	RTER	С	L	Р	QH
MAT PSY DFT WLD	1104 1120	Fundamentals of Mathematics Human Relations Blueprint Reading: Mechanical I Oxyacetylene Welding and Cutting	5 3 0 4 	0 0 0 0 -	0 0 3 15 - 18	5 3 1 9 18
SECO	ND Q	JARTER				
ENG PHY WLD DFT		Communications I Applied Science I Basic Arc Welding Blueprint Reading: Welding	3 4 0 	0 2 0 0 2	0 0 15 3 	3 4 9 1
THIRD	QUA	RTER				
MEC WLD	1117 1124	Communications II Metallurgy for Welders Advanced Arc Welding Inert Gas Welding	3 2 3 1 9	0 0 0 0 -	0 3 12 6 21	3 7 3 16
FOUR	TH QU	JARTER				
BUS MEC WLD WLD WLD	1112 1113	Small Business Operations Machine Shop Processes Mechanical Testing and Inspection Advanced Inert Gas Welding Introduction to Pipe Welding	3 1 3 1 9	0 0 0 0 0	0 3 3 9 6 	3 2 2 6 3

C - Class

L - Lab

P - Practicum





PERSONNEL

(Elected Yearly)

BOARD OF TRUSTEES Chairman Robert F. Joyce Vice Chairman.....John P. Arrowood APPOINTED BY THE GOVERNOR Term Expires Vice President, Wilson-Covington Construction Co. Regional Mgr., N.C. Dept. Natural Resources and Community Development Winston-Salem/Forsyth County Schools (Retired) Director, Office of Minority Affairs, Bowman Gray School of Medicine APPOINTED BY COUNTY COMMISSIONERS Instructor, Parkland High School Director, Consumer Credit Counseling Service Printing Instructor, Winston-Salem/Forsyth County Schools President, Facts Business Equipment, Inc. APPOINTED BY WINSTON-SALEM FORSYTH COUNTY **BOARD OF EDUCATION** Beaufort O. Bailey 1987 Media Director, Winston-Salem State University Dr. Charlie B. Hauser..... 1985 Winston-Salem State University (Retired) Carroll G. Tompson 1983 R.J. Reynolds Tobacco Company (Retired) Dr. H. P. VanCleve...... 1989 Bowman Gray School of Medicine APPOINTED BY STUDENT GOVERNMENT ASSOCIATION

Current SGA President (non-voting member)

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Dr. Bob H. Greene	President
T. Glen Fleeman, Jr	Executive Vice President for
	Instructional Affairs
Charles P. Branch	Vice President for Business Affairs
Charles R. King	Vice President for Student Services
James A. Rousseau	Vice President for Planning and Development
Larry V. Weaver	Administrative Assistant

INSTRUCTION

T. Glen Fleeman, Jr., Executive Vice President

Curriculum Programs

Marvin L. Allen	Dean, Business Technologies
Dr. Harley P. Affeldt	Dean, Engineering Technologies
Grace B. Corey	Dean, General Studies Division
Dr. James R. Winning	Dean, Health Technologies

Continuing Education

L. T. Williams	Dean
Dr. Velma A. Jackson	Associate Dean, Academic/ABE
R. Shelton Jones	Associate Dean, Avocational/Academic
Frances W. Proctor	Associate Dean, Health and Related



BUSINESS AFFAIRS

Charles P. Branch, Vice President

Joyce W. Keith	Director of Financial Services
Jerry D. Rogers	Director of Auxiliary and Plant Services
Glen A. Hunter	Chief Security Officer

PLANNING AND DEVELOPMENT

James A. Rousseau, Vice President

Individualized Learning Center

Susan R. Taylor	Director
Bonnie V. Stone	Coordinator
Anne M. Teachey	Coordinator

Institutional Development/Public Relations

Jean R. Perkins	Coordinator
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Library

Audrey B. Zablocki Director
Thomas F. Gordon Reader Services Librarian
Brenda B. Bodsford
Polly C. King Head, Library Technical Assistant
Jennifer Y. Springs Library Technical Assistant

STUDENT SERVICES

Charles R. King, Vice President

J. Bruce Shepherd	Dean, Admissions and CounselingDirector, Admissions and Recruitment
Diane L. Sims	Director, Student Financial Services
Borys Leoczko	
James A. Shields	Coordinator, Student Placement
George McLendon	Counselor/Coordinator Career Center
Benjamin L. Howell	
Colleen R. Richardson	
Sandra W. Suggs	Admissions Counselor
Rebecca M. Weaver	Admissions Counselor
E. Lorriane Wood	Admissions Counselor

PERSONNEL/EVENING PROGRAMS

Larry V. Weaver	 Administrative Assistant
Larry V. VVCaver	 Administrative Assistan





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Harkness, Donald G
Harrison, Harold
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King, Charles R
King, Mary L
Lee, Linda M

Lehmann, Kenneth L
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McDonald Cindy Secretary, Admissions Utilice
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Pegram, Lucille Secretary, Vice President for Student Services/ Dean of Admissions and Counseling
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Yates, Lenora

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MAINTENANCE MECHANICS

Timothy Kiser Ardeal Roseboro Robert Wallace

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Donna Bishop Hazel Broomfield Castina Cremedy Bonita Crosby Betty Larkin Leonard Melton Beulah Scales Michael Sheff Ruth Springs Flossie Williams











COURSE DESCRIPTIONS

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AGR 140 Home Maintenance

2 4 0 4

This course concentrates on the jobs associated with maintaining a lawn and home surroundings throughout the year. Instruction includes shrub fertilization, tree fertilization, disease control of lawns and shrubs, pruning, proper irrigation of shrubs and lawns, and proper use of herbicides and pesticides. It is designed for the person interested in making home maintenance his/her choice of career work. Prerequisite: None.

AGR 145 Entomology and Pathology

3 4 0 5

This course is a study of insects that attack ornamental plant materials. The nature, structure, and importance of each insect are studied in detail. Additional emphasis is placed upon detection, identification, and control of the insects studied. Methods for controlling diseases of ornamental crops are learned by studying the structure, life history, identification of the various parasitic disorders which plague ornamental trees, shrubs, flowers, and turf. Prerequisite: None.

AGR 150 House Plants

3 0 0 3

Instruction in this course includes simple botany, taxonomy, physiology, identification, culture, and care of house plants. One hundred of the more common indoor plants will be studied and identified. Prerequisite: None.

AGR 151 Plant Materials I

3 4 0 5

This course is an introduction to the woody plant materials grown in nurseries for landscape purposes and those found in woodlands and fields of North Carolina. The major emphasis is on deciduous shrubs and small trees. Prerequisite: None.

AGR 152 Plant Materials II

3 4 0 5

Additional trees and shrubs are studied in this course. The major emphasis is placed upon a detailed study of broad leaved and narrow leaved evergreens. Prerequisite: AGR 151.

AGR 153 Greenhouse Management

3 2 0 4

Greenhouse Management concentrates on procedures and practices of greenhouse plant production. This course also provides instruction in the construction and management of plastic and glass greenhouses, including heating, lighting, ventilation, and humidity. Crop studies include both cut flowers and pot plant crops. Prerequisite: None.

AGR 170 Plant Science

4 2 0 5

This is an introductory general botany and plant science course covering the fundamental principles of reproduction, growth functions, and development of seed bearing plants. Prerequisite: None.

AGR 180 Bedding Plant Production

2 2 0 3

This course is designed to enable students to start plants from seed and grow them to marketable stage through use of proper cultural practices. Prerequisite: None.

AGR 185 Soil Science and Fertilizer

5 2 0 6

This course deals with the basic principles of efficient classification, evaluation and management of soils. Upon completion of this course, the student should be able to demonstrate proper care, cultivation, fertilization, and conservation of soil. Prerequisite: None.

AGR 200 Practicum

0 0 30 3

This course will expose students to the physical aspects of jobs available in their chosen field and provide them opportunities for the development of personal relationships. Students will acquire the skills and practical knowledge necessary for success in their chosen career fields. Prerequisite: Must be second-year horticulture student.

AGR 201 Agricultural Chemicals

3 0 0 3

This course is designed to enhance the student's understanding of agricultural chemicals. Instruction will focus on the importance of agricultural chemicals, ingredients, formulation, and application with special emphasis on the effective and safe utilization of chemicals in agricultural pest control. Although the major emphasis is weed identification and those chemicals utilized for weed control, part of the course will be devoted to insecticides, fungicides, and others. Prerequisite: CHM 101.

AGR 210 Field Analysis

5 0 0 5

Students will keep records of the experiences in AGR 200 Practicum. They will relate such experiences to the following major areas of instruction: plant materials, plant science, soil science and fertilizers, agricultural chemicals, landscape construction, landscape gardening, plant propagation, and nursery management. Records compiled by the student will be summarized in the form of a weekly report and reviewed by the instructor. These reports will culminate in a final term paper. Prerequisite: Must be a second-year horticulture student who is also registered for the work AGR 200 practicum.

AGR 220 Vegetable and Flower Gardening

1 0 0 4

Upon completion of this course, the student will be able to plan effectively a complete vegetable garden that will encompass the entire year. The student will also learn how to grow vegetables properly by use of insecticides, herbicides, and proper fertilization. If possible, the students will have a garden to take care of so that they might carry out the practices they learn. This is to be a self-study course with help from the supervising instructor. Prerequisite: This course is for second-year horticulture students who are doing their work AGR 200 practicum.

AGR 240 Landscape Construction I

4 2 0 5

This course deals with the actual construction of brick patios, walks, steps, brick borders, brick walls around trees, lawn furniture, picnic tables, or other wood projects which may be used in a home landscape. It will also cover estimating the job cost of these various projects, including drawing plans to scale. Prerequisite: None.

AGR 241 Landscape Construction II

4 2 0 5

This course will be a continuation of AGR 240 Landscape Construction I, with added emphasis on students actually carrying out projects from planning stage to completion. Other skills will be acquired through additional projects. Prerequisite: AGR 240.

AGR 251 Landscape Gardening I

3 4 0 5

This course is an introduction to and study of the basic principles of landscape design. Considerable emphasis is placed on the problems associated with residential site development, including blueprint reading. Laboratory time is devoted to visiting established residential sites. The course is not oriented toward a mastery of creativity and artistry, but toward an understanding of certain principles fundamental to all landscape design endeavors. Prerequisites: AGR 151 and AGR 152.

AGR 252 Landscape Gardening II

3 4 0 5

Upon completion of this course, the student will be able to develop and maintain landscaped areas including planting, pruning, fertilization, and pest control. In addition to acquiring skills in selection and use of materials in landscape construction, the student will also receive instruction in the fundamentals of landscape economics, including costs, contracts, and calculation of areas, volumes, and plant quantities. Prerequisites: AGR 151, AGR 152, and AGR 251.

AGR 254 Plant Propagation

3 2 0 4

This course is a study of the basic concepts and principles of sexual and asexual propagation. Propagation techniques are utilized in the industry and studied through practical exercises conducted in laboratory sessions. Prerequisite: None.

AGR 256 Nursery Management I

2 4 0 4

This is an introductory study of nursery operations designed to acquaint the student with the diversity of nursery plant production, equipment, and operation. The theory and practices necessary to produce profitable nursery stock will be acquired through the study of such areas as pruning, fertilization, plant protection, and others. Prerequisite: None.

AGR 257 Nursery Management II

2 4 0 4

This course is a continuation of AGR 256 Nursery Management I, with increased emphasis placed upon production schedules and choice and quantities of stock to be grown as well as developing cost data, price schedules, and record keeping for economically important nursery crops. Planning of nursery layout and facilities is also covered. Prerequisite: AGR 256.

AGR 258 Turf Practices

3 2 0 4

This course is a study of special-purpose turf grasses, including identification, use, establishment, and maintenance of specific grasses. Laboratory time is used for field trips to golf courses where students observe and participate in those operations required to maintain a healthy, vigorous playing surface. Prerequisite: AGR 185.

AGR 259 Garden Center Management

1 2 0 2

This course covers all phases of garden center operation, including some of the major problems. Areas of study include layout, stocking, product knowledge, traffic flow, seasonal fluctuations, risks, diversification, and merchandising. Ample time will be devoted to visitations to established garden center operations. Prerequisite: None.

AHR 0106 Architectural Mechanical Equipment

3 0 3 4

The course provides general study of heating, air conditioning, plumbing and electrical equipment, materials and symbols, building code requirements pertaining to residential and commercial structures, reading and interpretation of working drawings by mechanical engineers, and coordination of mechanical and electrical features with structural and architectural designs. Prerequisite: None.

AHR 1101 Automotive Air Conditioning

2 0 3 3

This course is a general introduction to the principles of refrigeration. The assembly of the components and connections necessary in the mechanisms, the methods of the operation and control, and the proper handling of refrigerants in charging the system are covered. Prerequisite: None.

AHR 1102 Fundamentals of Refrigeration

7 0 9 10

The course includes identification, selection, and use of hand, measuring and special refrigeration tools; use of power drills, grinders, and pipe threaders; and use of copper tubing, fittings, and tubing fabrication. Also included in the course is physics related to refrigeration; the basic refrigeration cycle; classification, characteristics, and properties of refrigerants; and types, purpose, and principles of operation of compressors, condensors, receivers, and evaporators. The assembly and operation of a basic refrigeration system, leak checking, evacuating and charging, compressor operational checks, and system trouble analysis are covered. Prerequisite: None.

AHR 1103 Domestic and Commercial Refrigeration

6 0 12 10

The course covers types and operating principles of domestic hermetic units, domestic absorption units, operation and trouble analysis of hermetic electrical components and circuits, repair and maintenance of hermetic units, calculation of heat loads, and equipment selection and system balance. The course covers operating principles, installation, and maintenance of the following: floats, automatic and thermostatic expansion valves, thermostatic and pressure motor controls, heat exchangers, oil separators, driers, suction filters, and minor accessories. Also included are the installation, operation, service, and trouble analysis of the following equipment: walk-in coolers, display cases, frozen food cabinets, reach-in cabinets, water coolers, ice makers, multiple compressors, and evaporator system operations. Prerequisite: AHR 1102.

AHR 1104 Air Conditioning Controls I

5 0 3 6

The course includes theory of electrical and electronic controls; principles of operation, application, connection, and adjustment; use of pressure regulators and electrical thermostats, dual thermostats, heating-cooling thermostats and humidistats, valves, dampers, pilot positioners, and two-position controls. The principles of operation, application, wiring, and adjusting of controls are covered. Prerequisite: None.

AHR 1105 Principles of Air Conditioning

5 0 9 8

The course provides an introduction to air conditioning, psychrometrics, principles of load estimating, applied load estimating, residential and commercial equipment, and balancing the system. Prerequisite: None.

AHR 1106 Air Conditioning Controls II

3 0 0 3

The course covers theory of pneumatic controls, principles of operation, application, connection and adjustment, pressure regulators and pneumatic thermostats, dual thermostats, heating-cooling thermostats, humidistats, valves, dampers and pilot positioners, non-bleed controllers, and two-position controls. The principles of operation, application, wiring, and adjusting of controls are covered. Prerequisite: AHR 1104.

AIB 202 Principles of Banking

4 0 0 4

This course presents the fundamentals of bank functions in a descriptive fashion so that the beginning banker may acquire a broad and operational perspective. It reflects the radical changes in banking policy and practice which have occurred in recent years. Topics covered are banks and the monetary system, negotiable instruments, the relationship of the commercial bank to its depositors, types of bank accounts, the deposit function, the payments function, bank loans and investments, other banking services (trust, international, and safe deposit), bank accounting and marketing, external and internal controls, and the public service obligation of banks. Prerequisite: None.

AIB 203 Bank Investments

4 0 0 4

AIB's bank investments course covers the sources and use of bank funds and the place of investment in the overall scheme of bank operations. Especially important are the relationship of investments to business and the unique functions, advantages, and purpose served by a wide range of securities. Investment terminology is covered in detail. Prerequisite: None.

AIB 205 Bank Management

4 0 0 4

This course presents new trends which have emerged in the philosophy and practice of management. The study and application of the principles outlined provide new and experienced bankers with a working knowledge of bank management. It should be noted that the course is not one of personnel management but rather of business management. It touches on objectives, planning, structure, control, and the interrelationship of various bank departments. Since case study is becoming well established as an effective management learning technique, the course also uses illustrative cases. Prerequisite: None.

AIB 209 Installment Credit

4 0 0 4

This modular course emphasizes the pragmatic "how-to" details of installment credit. Topics covered are principles of credit evaluation, open-end credit, marketing bank services, collection policies and procedures, legal aspects, financial statement analysis, direct and indirect installment lending, leasing and other special situations, installment credit department management, insurance and rate structure, and yields. Prerequisite: None.

AIB 210 Money and Banking

4 0 0 4

This course presents the basic economic principles most closely related to the subject of money and banking in a context of topics of interest to present and prospective bank management. The course stresses the practical application of the economics of money and banking to the individual bank. Some of the subjects covered include structure of the commercial banking system; the nature and functions of money; banks and the money supply; cash assets and liquidity management; bank investments, loans, earnings, and capital; the Federal Reserve System and its policies and operations; Treasury Department operations; and the changing international monetary system. Prerequisite: None.

AIB 231 Savings and Time Deposit

4 0 0 4

This course reflects recognition of the fact that a knowledge of the historical development of savings institutions and an awareness of the basic economic function of the savings process are necessary to an understanding of the current operations and policies of these institutions. It begins with a review of the economics of the savings process in order to clarify important differences between financial savings by individuals or organizations and real savings that appear as capital formation. Different types of financial savings are reviewed in order to describe the system of financial flow from income to capital investment. Also covered are interest rates, types of savings accounts, and the management of savings institutions (asset management, operations control, supervision, liquidity, and marketing). Prerequisite: None.

AIB 233 Analysis of Financial Statements

4 0 0 4

This course is divided into two main sections: characteristics of financial statements and financial statement analysis. The first section serves as a useful review of basic accounting principles for those students who have studied accounting. For those who have not, this section provides the minimum accounting background necessary for

profitable study of financial statement analysis. (It should be emphasized, however, that Analysis of Financial Statements is an advanced course and difficult for students with little background in accounting.) The second section of the course covers goals, methods, and tools of analysis; analysis of profit and loss, accounts receivable, inventories, and balance sheets; the relationship of balance sheet accounts to sales and to projected statements and cash budgets. Prerequisite: BUS 120.

AIB 235 Loan and Discount

3 0 0 3

This course presents the essential facts about promissory notes, including calculating interest and discounting commercial paper; guaranties; general collateral agreements; examining and processing documents accompanying notes secured by stocks, bonds, and savings account passbooks; and the concepts of attachment, perfection, priority, default, and foreclosure. The course uses programmed instruction and several simulation exercises. Prerequisite: None.

AIB 236 Trust Functions and Services

0 0 4

This course provides an overview of many of the generally accepted principles of the law of estates, trusts, and agencies as it takes the student on a step-by-step study of trust functions and services encountered in the daily operation of a trust department. Prerequisite: AIB 202.

AIB 237 International Banking

4 0 0 4

This course presents the basic framework and fundamentals of international banking: how money is transferred from one country to another, how trade is financed, what the international agencies are and how they supplement the work of commercial banks, international lending, and how money is changed from one currency to another. Prerequisite: None.

AIB 238 Law and Banking

4 0 0 4

This course is designed not only to present an introduction to basic commercial law, but to relate it more specifically to banking and bank transactions. Topics include contracts, agency and partnerships, corporations, real property, personal property and sales, the Uniform Commercial Code, negotiable instruments and bank collections, and secured financing. Prerequisite: None.

AIB 239 Marketing for Bankers

4 0 0 4

This course presents marketing as a broad concept, far more complex than public relations, advertising, and personal selling, which are important components of marketing but are not individually or collectively the equivalent of marketing. It is designed for bankers who are unacquainted with marketing and deals with concepts and philosophies of marketing, marketing information, research, and target; the marketing mix (product strategy, distribution strategy, advertising and sales promotion, personal selling, and pricing strategy); and the methods of marketing planning. Prerequisite: None.

AUT 1111 Automotive Body Repair I

3 0 12 7

The course includes the basic principles of automobile construction, design, and manufacturing; a thorough study of angles, crowns, and forming of steel into the complex contour of the present-day vehicles; and the application of basic principles of straightening, aligning, and the spraying of primer surfacer. Prerequisite: None.

AUT 1112 Automotive Body Repair II

3 0 15 8

The course provides a thorough study of the requirements of a metal worker including the use of essential tools, forming fender flanges and beads, and straightening typical

auto body damage. The student begins acquiring skills such as shaping angles, crowns, and contour of the metal of the body and fenders. Metal working and the spraying of primer surfacer are also covered. Prerequisites: AUT 1111 and WLD 1101.

AUT 1113 Metal Finishing and Painting

2 0 12 6

This course is intended to teach the student the principles and techniques of refinishing auto bodies. Topics covered are paint removal, masking, preparing surfaces, paint selection, spray equipment, and practice spraying. Prerequisites: AUT 1112 and WLD 1105.

AUT 1114 Frame Straightening and Alignment

2 0 6 4

This course is an introduction to the repair of automobile frames and suspension systems. Instruction will include assessing frame damage, framing, frame straightening equipment, safety, frame straightening, and frame repair. Prerequisite: AUT 1112.

AUT 1116 Auto and Truck Painting

3 0 21 10

This course is intended to give the student practice in surface preparation and paint application. The following topics will be covered: review of finishes, surface preparation, undercoats, topcoats, and common painting problems. Prerequisite: AUT 1113.

AUT 1123 Automotive Chassis and Suspension Systems

4 0 15 9

This course covers the principles and functions of the components of automotive chassis and practical job instruction in adjusting and repairing suspension and steering systems. Units to be studied include shock absorbers, springs, steering systems, steering linkage, and front-end alignment. Prerequisite: None.

AUT 1124 Automotive Power Trains

3 0 9 6

The course covers principles and functions of automotive power train systems including clutches, transmission gears, torque converters, drive shaft assemblies, rear axles, and differentials. The identification of troubles, servicing, and repair are covered. Prerequisite: None.

AUT 1125 Automotive Servicing

3 0 9 6

Emphasis is placed on the shop procedures necessary in determining the nature of troubles developed in the various component systems of the automobile. Trouble-shooting of automobile systems and providing a full range of experience in testing, adjusting, repairing, and replacing are covered. Prerequisite: None.

BIO 010 Human Anatomy

3 0 0 0

This course is designed to acquaint students with basic knowledge of human anatomy by tracing system pathways. The student may also gain proficiency in medical and biological terminology. Prerequisite: None.

BIO 101 General Biology I

3 2 0 4

This is a functional course in biology with emphasis on scientific reasoning, cellular structure and function, human anatomy and physiology, and the diversity of living organisms. Prerequisite: None.

BIO 102 General Biology II

3 2 0 4

This is a continuation of BIO 101 with emphasis on reproduction and development, inheritance, ecological principles, and evolution by natural selection. Prerequisite: BIO 101.

BIO 107 Anatomy and Physiology I

3 2 0 4

This is an introduction to normal structure and function of the human body. When relevant, clinical applications are made to relate normal structure and function to basic pathological conditions. Students are given the opportunity to employ their assimilated knowledge in class discussion and laboratory work. Laboratory participation introduces additional information which the student gains by participating in various lab exercises and learning experiences. Prerequisite: None.

BIO 108 Anatomy and Physiology II

3 2 0 4

This is a continuation of BIO 107 Anatomy and Physiology I with emphasis on the vascular system, respiratory system, digestive system, urinary system, fluid and electrolyte balance, endocrine system, and the reproductive system. Prerequisite: BIO 107.

BIO 111 Microbiology

3 2 0 4

This is a one-quarter course designed to provide an understanding of microbiological principles and applications. Emphasis is placed on microbial classifications, structure and function, host-parasite relationships, and relations to man. Laboratory sessions are concerned with principles of identification, slide techniques, culture methods, and sterile procedures. Prerequisite: None.

BIO 112 Pathology

3 0 0 3

Pathology is a one-quarter course designed to introduce the students to the study of the disease processes in the human body. Emphasis will be placed upon the cause, pathogenesis, occurrence, and prognosis of common human diseases. Prerequisites: BIO 107, BIO 108, and BIO 111.

BIO 115 Medical Terminology I

1 0 0 1

This is the first of a series of two courses in which the student is introduced to terms related to all areas of medical science, hospital service, and paramedical specialties. Terms introduced parallel the topics covered in BIO 107 Anatomy and Physiology I. Prerequisite: None.

BIO 116 Medical Terminology II

1 0 0 1

This is the second of a series of two courses in which the student is introduced to terms related to all areas of medical science, hospital service, and paramedical specialties. Terms introduced parallel the topics covered in BIO 108 Anatomy and Physiology II. Prerequisite: BIO 115.

BIO 139 Topographical Anatomy

2 0 0 2

The student receives a coordinated approach to aid him in visualizing his patient's anatomy. This reconstructional technique builds the body from its skeleton toward the surface. Living anatomy is stressed throughout, so that surface landmarks and palpations are constant reminders of deeper structures. Prerequisites: BIO 107 and BIO 108.

BIO 169 Fundamentals of Disease Processes

4 0 0 4

The student is introduced to the major processes involved in producing pathological entities and disorders in man and how such states interfere with normal physiology. After this knowledge of diseases and abnormal states is acquired, it is correlated with the more commonly seen pathology in clinical practices. Emphasis will then be placed upon the fundamental principles of microbiology, the relationship of microorganisms to disease, modes of transmission, control, and the etiological agents of infectious diseases. Prerequisites: BIO 107 and BIO 108.

BUS 010 Pre-Technical Accounting

5 0 0 0

This course is designed to present an overview of the complete bookkeeping cycle including journalizing, posting, summarizing, preparing financial statements, and the closing of books. Prerequisite: None.

BUS 030 Introduction to Shorthand

5 0 0 0

This course provides for the introduction of basic shorthand theory, dictation of practiced materials and transcription skills, and development of a fluent reading rate. This is an introduction to BUS 106 Shorthand I. Prerequisite: None.

BUS 101 Introduction to Business

5 0 0 5

A survey of the business world is presented in this course with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization, and management. Prerequisite: None.

BUS 102 Typewriting I

2 0 3 3

Typewriting I is an introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts. Prerequisite: None.

BUS 103 Typewriting II

2 0 3 3

The development of speed and accuracy with further mastery of correct typewriting techniques is the objective of Typewriting II. These skills and techniques are acquired by completing typing projects that include tabulation, manuscripts, correspondence, and business forms. Prerequisite: BUS 102 or the equivalent.

BUS 104 Typewriting III

2 0 3 3

This course emphasizes production typing problems and speed building. Attention is given to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscript, correspondence, and business forms. Prerequisite: BUS 103 or the equivalent.

BUS 105 Typewriting IV

2 0 3 3

Typewriting IV is a continuation of production typing problems and speed building through an office simulation practice set. Mailable copies are required. Prerequisite: BUS 104 or the equivalent.

BUS 106 Shorthand I

3 0 3 4

This is a beginning course in the theory and practice of reading and writing shorthand. It emphasizes phonetics, penmanship, word families, brief forms, and phrases. Prerequisite: None.

BUS 107 Shorthand II

3 0 3 4

This course is a continued study of theory with emphasis on speed in dictation and accuracy in transcription. A minimum dictation rate of 60 words per minute is required. Prerequisite: BUS 106 or the equivalent.

BUS 108 Shorthand III

3 0 3 4

This course is a continuation of theory and speed building as well as an introduction to office-style dictation. The development of speed in dictation to a minimum dictation rate of 80 words per minute and mailability are the objectives of this course. Prerequisite: BUS 107 or the equivalent.

BUS 109 Business Mathematics

5 0 0 5

Business mathematics emphasizes fundamental mathematical operations and their application to business problems. Topics covered include sales records, inventories, commissions, markups, depreciation, and interest. Prerequisite: None.

BUS 110 Office Machines

2 0 3 3

This course is designed to introduce students to various types of electronic calculators and their use in basic business mathematical computations. The fundamental principles of using the 10-key touch in addition, subtraction, multiplication, and division are covered, as well as such specifics as percents, discounts, commissions, chain discounts, interest, markup, markdown, and payroll. Prerequisite: None.

BUS 112 Machine Transcription I

2 0 3 3

This course is the first of three courses designed to introduce and develop skills in machine transcription. Skills are developed in operating a transcribing unit and in word processing. Prerequisites: BUS 103 and ENG 102.

BUS 113 Vocabulary/Terminology I

3 0 0 3

This course is designed to develop an understanding of the terminology and vocabulary used in business, technical, and professional offices. Prerequisite: None.

BUS 114 Vocabulary/Terminology II

0 0 3

As a continuation of BUS 113 Vocabulary/Terminology I, this course emphasizes terminology and vocabulary in the business environment with special emphasis on medical and legal professions as well as word processing. Prerequisite: BUS 113.

BUS 115 Business Law I

3 0 0 3

This course is designed to acquaint the student with the fundamentals and principles of business law. Areas of instruction include contracts, negotiable instruments, and agencies. Prerequisite: None.

BUS 116 Business Law II

3 0 0 3

Business Law II is a study of laws pertaining to bailment, sales, risk-bearing, partnership-corporation, mortgages, and property rights. Prerequisite: BUS 115.

BUS 118 Secretarial Accounting I

4 0 3 5

This course is the first of two courses designed specifically for secretarial majors to study the principles, practices, and tools of the accounting process as encountered in the secretarial profession. Prerequisite: BUS 109.

BUS 119 Secretarial Accounting II

4 0 3 5

This course is the second of two courses designed to further develop skills in accounting as needed by secretarial majors. The principles defined in BUS 118 Secretarial Accounting I are broadened and put to use through workbook problems and a practice set. Prerequisite: BUS 118.

BUS 120 Accounting I

4 0 3 5

This course is a study of the principles, techniques, and tools of the accounting process. The areas of instruction include the collecting, summarizing, analyzing, and reporting of financial information with emphasis on the application of the principles learned. Prerequisite: None.

BUS 121 Accounting II

4 0 3 5

This course concentrates on the application of the procedures involved in the recording of receivables, payables, inventories, deferrals, accruals, plant assets, and payrolls. Prerequisite: BUS 120.

BUS 122 Accounting III

4 0 3 5

This course expands the principles and concepts set forth in BUS 120 Accounting I and BUS 121 Accounting II. Manufacturing and job order cost systems, budgetary control, and standard cost systems are major areas of instruction. Additional attention is given to the decision-making process as determined from cost and revenue relationships, management reports, changes in financial position, consolidated statements, and financial statements. Prerequisite: BUS 121.

BUS 123 Business Finance

5 0 0 5

This course is a study of the principles and problems of financing business firms. Topics included in instruction are source and use of funds, cost of capital, dividends, leasing, financial statement analysis, and mergers. Prerequisite: BUS 122.

BUS 125 Accounting Practice Set

1 0 0 1

This is a comprehensive practice set involving the principles learned in BUS 120 Accounting I, BUS 121 Accounting II, and BUS 122 Accounting III. The practice set will include business transactions common to both sole proprietorships and corporations. Prerequisites: BUS 120, BUS 121, and BUS 122.

BUS 128 Personal Financial Management

5 0 0 5

This course covers the basic concepts of personal finance. The student will become familiar with establishing financial objectives, investment risks, financial institutions, investment alternatives, making investment decisions, and estate planning. Prerequisite: None.

BUS 130 Career Planning and Job Hunting

2 0 0 2

This course is an in-depth study in developing realistic career objectives and goals. The student will learn techniques to sell himself/herself in the job market and how to set the stage for long-term, fulfilling career development. Prerequisite: None.

BUS 141 Medical Vocabulary and Terminology

3 0 0 3

This course provides students with a means to develop an understanding of vocabulary and terminology for clerical employment opportunities in the medical field. Prerequisite: None.

BUS 162 Fundamentals of Real Estate I

5 0 0 5

Upon completion of this course, the student will have an understanding of the fundamental principles and theories of real estate including terminology, North Carolina's licensing laws, ethics, legal environment, forms and instruments, mathematics, finance, closing statements, and procedures. Prerequisite: None.

BUS 163 Fundamentals of Real Estate II

5 0 0 5

This course is a continuation of BUS 162 Fundamentals of Real Estate I. Theory and practice of real estate are covered, including methods of financing, appraisals, advertising, and marketing. Prerequisite: BUS 162.

BUS 164 Real Estate Law

5 0 0 5

This is a survey course of law as it relates to real estate activities including the legal aspects pertaining to the sale, purchase, and management of real property. Special emphasis is placed on the legal steps needed to handle real estate transactions from the preparation of the listing contract to the closing statement. Prerequisite: None.

BUS 190 Horticultural Business Management

3 0 0 3

This course is designed to instruct students on how to set up a small business in the area of horticulture. The student will learn various concepts of business management, planning, decision making, and leadership. Prerequisite: None.

BUS 206 Dictation - Transcription

3 0 3 4

This course is a continuation of theory with emphasis on speed building in dictation, mailability in transcription, and office-style dictation. A minimum dictation rate of 100 words per minute is required. Prerequisite: BUS 108.

BUS 209 Real Estate Finance

5 0 0 5

This course is a study of real estate finance, including an analysis of financial institutions, techniques, and instruments necessary in real estate. Topics of instruction include the source of funds, types of mortgages, roles of government, agencies, interest rates, loan costs, closings, and competition in the money market. Prerequisite: None.

BUS 210 Business Statistics

5 0 0 5

This course is designed to introduce students to basic concepts and methods of statistics. Students are taught to summarize data and then employ a decision-making process based on statistical inference. Prerequisite: None.

BUS 211 Reprographics

2 0 3 3

This course is designed to give instructions in the operation of duplicating equipment, electronic typewriters, and transcribing machines. Prerequisite: BUS 103. Corequisite: BUS 213.

BUS 212 Machine Transcription II

2 0 3 3

This course is the second of three courses designed to introduce and develop skills in machine transcription. Skills are developed through direct transcription from oral dictation to mailable typewritten form, which involves correct punctuation, spelling, and typing styles. Prerequisite: BUS 112.

BUS 213 Filing

2 0 0 2

This course covers the fundamentals of indexing and filing, combining theory and practice by use of miniature letters, filing boxes, and guides. The course includes alphabetic, numeric, and geographic filing as well as records control. This course is a corequisite of BUS 211 Reprographics, or it can be taken in the Individualized Learning Center. Prerequisite: None.

BUS 214 Secretarial Procedures

5 0 0 5

This course is designed to acquaint the student with the responsibilities encountered by a secretary during the workday. The areas of instruction are receptionist's duties, handling the mail, telephone techniques, travel information, telecommunications, office records, purchasing of supplies, and office organization. Prerequisites: BUS 104 and ENG 102.

BUS 215 Machine Transcription III

2 0 3 3

This course is the third of three courses designed to introduce and develop skills in machine dictation and transcription. Skills are developed by the operation of dictating, transcribing, and word processing equipment. Prerequisite: BUS 212.

BUS 216 Real Estate Sales

3 0 0 3

This course is a study of the current sales techniques in the real estate industry, including problems in selling as well as emphasis on consumer motivation and reactions. Particular emphasis is placed on morals and ethics related to the sale of real property. Other topics include the methods of securing property listings and prospective customers, bringing the prospect and property together, the use of advertising in the selling function, the basic development of a sales plan, and sales presentation. Prerequisite: None.

BUS 217 IBM Mag Card II Mini Course

2 0 0 2

This course is designed to give concentrated instructions on the IBM Mag Card II Typewriter. Students will receive instruction on the features of the typewriter, typing and playing back various problems in memory, working with magnetic cards, scanning, and making revisions. Prerequisite: BUS 103.

BUS 218 Memory Typewriter Mini Course

2 0 0 2

This course is designed to intensify student development in the use of automatic typewriters. Basic training is included in operating an IBM Memory Typewriter, and skills are developed through special applications and problems. Prerequisite: BUS 103.

BUS 219 Office Application

1 0 20 3

During the last quarter only, students are assigned to work in a business or professional office for 20 hours per week. The objective is to provide actual work experience for secretarial students and an opportunity for the practical application of the skills and knowledge previously learned. Prerequisite: Student must be in final quarter of course work.

BUS 221 Intermediate Accounting I

5 0 0 5

This course is a thorough treatment of the field of general accounting providing a foundation for specialized studies that follow. The course includes the framework of accounting, the balance sheet, income and retained earnings statements, cash, temporary investments, receivables, and inventories. Prerequisite: BUS 122.

BUS 222 Intermediate Accounting II

5 0 0 5

The course is designed to familiarize the student with the objectives of accounting and the principles that have evolved in response to the objectives. The course includes inventories estimating and valuation, current liabilities, fixed assets, intangible assets, long-term investments, bonds, leases, and pensions. Prerequisite: BUS 221.

BUS 223 Governmental Accounting

2 0 3 3

This course is a study and application of principles of accounting and budgeting as they apply to municipal, state, and federal governmental units. Prerequisite: BUS 221.

BUS 225 Managerial Cost Accounting I

2 0 3 3

This course is a study of the principles, techniques, and tools of the cost accounting processes within the job cost and process cost system. Instruction emphasizes the application of principles learned. Prerequisite: BUS 122.

BUS 226 Managerial Cost Accounting II

2 0 3 3

This course is a continuation of BUS 225 Managerial Cost Accounting I, with emphasis on standard cost principles and procedures, selling and distribution cost, direct costs, budgets, and executive use of cost figures. Prerequisite: BUS 225.

BUS 227 Intermediate Accounting III

2 0 3 3

This course is designed to familiarize the student with the objectives of accounting and the principles that have evolved in response to the objectives. The course includes leases, paid in capital, retained earnings, book value and earnings per share, accounting changes and correction of errors, statement from incomplete records, the statement of changes in financial position, and financial statement analysis. Prerequisite: BUS 222.

BUS 228 Real Estate Investment and Taxation

3 0 0 3

This course is a study of fundamental investment concepts such as location, timing, and methods of financing needed by the prospective investor for successful real estate investment. Special emphasis will be placed on investment during the development process, what to buy, and how to buy. Other topics to be discussed are how to take title for individual ownerships or partnerships, when to invest in real estate corporations and trusts, tax consequences and investment, and the influence of federal and state laws on real estate investments. Prerequisite: None.

BUS 229 Taxes

2 0 3 3

This course is a study and application of federal and state taxes as applied to individuals, partnerships, and corporations. The major emphasis is on the preparation of individual income tax returns. Prerequisite: None.

BUS 230 Advanced Taxes

2 0 3 3

This course is a study and application of federal and state taxes as applied to individuals, partnerships, corporations, "Subchapter S" corporations, and estate and gift taxes. Prerequisites: BUS 229 and BUS 121.

BUS 231 Real Estate Merchandising

3 0 0 3

This course is a survey of the field of real estate advertising with emphasis on the relationship to the market structure of our economy. Prerequisite: None.

BUS 232 Sales Development

3 0 0 3

This course is a study of retail, wholesale, and specialty selling. The emphasis is on mastering the fundamentals of selling. The preparation and execution of a sales demonstration are required. Prerequisite: None.

BUS 233 Personnel Management

3 0 0 3

Personnel management is the study of the principles of organization and the management of personnel. Specific areas of study include procurement, placement, training, performance checking, supervision, remuneration, labor relations, fringe benefits, and security. Prerequisite: None.

BUS 234 Advanced Sales

3 0 0 3

This course is a continuation of BUS 232 Sales Development. Prerequisite: BUS 232.

BUS 235 Business Management

5 0 0 5

This course is an introduction to the concepts of business and organizational management. Through study in such areas as planning and decision making, organizational

structures and behavior, leadership, motivation, and resources control, the student will acquire the skills to analyze and practice good management procedures. Prerequisite: None.

BUS 236 Land Development

3 2 0 4

This course is a study of land and population economics, land utilization, and the development factors related to manufacturing, labor, transportation, and commerce in or near the development location. Prerequisite: None.

BUS 237 Wholesaling

3 0 0 3

This course is a comprehensive analysis of the wholesaling function emphasizing the principles and techniques employed by today's wholesale managers. The role of wholesaling in our distribution system and its relation to production and retailing are thoroughly analyzed. Prerequisite: None.

BUS 238 Land Use Policy and Governmental Influences on Real Estate

3 2 0 4

This course is a study of local and national trends in the development, use, and value of real property, as well as governmental policies and their effect on the real estate market. Skills are developed in the analysis, research, and correlation of the various trends, policies, and factors affecting real estate. Prerequisite: None.

BUS 239 Marketing

5 0 0 5

This course is a study of the principles and problems of marketing goods and services in a free enterprise economy. Topics of instruction include product selection and development, promotion, channels of distribution, and pricing. Prerequisite: None.

BUS 241 Social Stratification

3 0 0 3

This course is an analytic approach to the existence of social classes in nearly all societies while offering specific concepts and research on buying, living, and social stratification in the United States. Prerequisite: None.

BUS 242 Display and Design

3 2 0 4

This course is an introduction to basic layout and design of internal commercial dispalys in retail stores and service institutions. Prerequisite: None.

BUS 243 Advertising

4 0 0 4

Advertising is the study of the methods and techniques used by advertisers and agencies to persuade the public to buy. Topics covered are market research, selection of media, and evaluation and testing of advertisment effectiveness. Theory, writing, and designing advertising copy are included in class activities. Prerequisite: None.

BUS 244 Marketing Research

4 2 0 5

This course is a study of research methods, procedures, and techniques. A practical research problem integrating finance, statistics, sampling, and collecting of data is required. Prerequisite: None.

BUS 245 Retailing

5 0 0 5

This course is a study of the role of retailing in our distribution system. Topics of instruction include the development of present retail practices, functions performed, principles governing effective operation, and managerial problems resulting from current economic and social trends. Prerequisite: None.

BUS 246 Public Relations

3 0 0 3

Public relations focuses on the planned effort necessary to influence public opinion through good character and responsible performance by emphasizing the necessity of mutually satisfactory two-way communications. Public relations for businesses is given special attention. Prerequisite: None.

BUS 247 Business Insurance

3 0 0 3

This course is a presentation of the basic principles of risk insurance and their application as well as a survey of the various types of insurance. Prerequisite: None.

BUS 249 Marketing-Retailing Seminar

5 0 20 7

This course provides the student with an opportunity to pursue, under supervision, work experience in the field of marketing with the objective of providing realism and motivation to his/her field of study. Prerequisite: None.

BUS 250 Word Processing I

1 4 0 3

This course is the first of two courses designed to instruct students in using a word processing system for creating, editing, printing, and storing documents. Through the use of a training workbook, students will learn to produce mailable business documents. Prerequisite: BUS 104 and ENG 102.

BUS 251 Word Processing II

1 4 0 3

This course is the second of two courses designed to instruct students in using a word processing system. Students will apply skills acquired in BUS 250 Word Processing I to daily office tasks. Prerequisite: BUS 250.

BUS 262 Fashion Merchandising

3 2 0 4

This course is designed to acquaint the student with fashion and style, characteristics of style, trends, coordination of color, and design analysis. Prerequisite: None.

BUS 269 Auditing

2 0 3 3

Auditing is a study of the theory and practices of auditing, including professional standards and rules of conduct. The student will learn the specific techniques of auditing various balance sheet accounts and comparative analysis using rapid calculation procedures. Study will also include detailed audits, internal auditing, and internal control as well as current trends in statement preparation. Prerequisite: BUS 222.

BUS 270 Advanced Accounting

5 0 0 5

This course is a study of advanced principles and practices with special emphasis on the development of worksheet techniques for solution of problems. Accounting procedures related to partnerships, branch accounting, and parent-subsidiary relationships are studied in depth. Current articles from professional journals are studied and discussed. Prerequisite: BUS 222.

BUS 272 Principles of Supervision

3 0 0 3

This course is a study of the basic responsibilities of the supervisor and his relationship to supervisors, subordinates, and associates. The methods of supervision and problem-solving techniques are presented through the case study method. Prerequisite: None.

BUS 292 Appraisal I

3 0 0 3

This course is a study of the principles and theory of appraising real property. Topics

studied include site evaluations, building materials and components, methods of appraising property, professional organizations, and developing and operating an appraisal business. Prerequisite: None.

BUS 293 Appraisal II

3 2 0 4

This course is a study of the methods and techniques used in estimating the value of residential properties. Topics include analysis of economic factors affecting the value of real estate; local, state, federal, and neighborhood influences; and attitudes and estimation of value. Prerequisite: BUS 292.

BUS 294 Appraisal III

3 2 0 4

This course is a study of the capitalization of income and the income approach to value. Topics covered include an analysis of steps to estimate the value of income-producing properties such as apartments, hotels, motels, office buildings, retail stores, and industrial buildings. Other areas of study include recapture rates, capitalization rates, and appraisal of lease interests. Prerequisite: BUS 293.

BUS 296 Property Management

3 0 0 3

This course is a study of the nature of property management, the types of property, lease preparation, protection of property, and property maintenance. Other topics include fair housing, tenant selection, advertising, ethics, budgeting, and associations with people. Prerequisite: None.

BUS 1103 Small Business Operations

3 0 0 3

This course is an introduction to business operation. Areas of instruction include basic business law, business forms and records, financial problems, ordering and inventory control, layout of equipment and offices, and employer-employee relations. Prerequisite: None.

BUS 1122 Typing I

2 0 3 3

This course is an introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts. Prerequisite: None.

CAR 1101 Framing, Sheathing, and Insulating I

2 0 18 8

The course provides instruction in the principles and practices of frame construction beginning with the foundation sills and including floor joists, subfloors, wall studs, ceiling joists, rafters, bridging, bracing; sheathing, and interior wall partitions. The layout and construction methods of common types of roofs using standard rafter construction, truss construction, post and beam construction, and the application and selection of sheathing and roofing are covered. Consideration is given to the coordination of carpentry work with installation of mechanical equipment such as electrical, air conditioning, heating, and plumbing. Prerequisite: None.

CAR 1102 Framing, Sheathing, and Insulating II

3 0 18 9

This course is a continuation of CAR 1101 Framing, Sheathing, and Insulating I. Prerequisite: CAR 1101.

CAR 1103 Interior and Exterior Trim

3 0 21 10

This course covers cornice work, siding, and the installation of windows and doors. Prerequisite: None.

CAR 1105 Finish Work

6 0 21 13

Exterior and interior trim and the finish carpentry to complete the general carpentry program are covered as well as materials ans methods used in finish carpentry such as exterior cornices, door and window trim, interior flooring, door and window facings, moldings, and cornice construction. Also included are the installation of hardware, construction and installation of built-in equipment and cabinets, and millwork as performed by the general carpenter for building construction. Prerequisite: None.

CAR 1114 Building Codes

3 0 0 3

This course covers a study of applicable sections of city, state, and national codes. The course material is correlated with all other carpentry courses. Prerequisite: None.

CHM 010 Pre-Technical Chemistry

3 2 0 0

This is an elementary course in chemistry equivalent to a high school level of difficulty. It provides the necessary foundation in chemistry for students who enter (1) a physical science technical curriculum which requires chemistry at the beginning or (2) a technical program based on the biological sciences. Topics and laboratory experiments are planned to teach chemistry which is related to the various chemical aspects of biological science. Laboratory exercises and experiments are designed to teach the fundamentals of chemistry and develop chemical laboratory skills. Prerequisite: None.

CHM 101 Chemistry

1 2 0 5

This course is a study of the physical and chemical properties of substances, chemical changes, elements, compounds, gases, chemical combinations, weights and measurements, and theory of metals, acids, bases, salts, solvents, solutions, and emulsions. In addition, it includes the study of carbohydrates, electrochemistry, electrolytes, and electrolysis. Industrial and agricultural applications are emphasized. Prerequisite: None.

CHM 103 Chemistry — General and Inorganic

3 2 0 4

Students will be introduced in lecture to important chemical principles fundamental to the understanding of life processes. This will include a foundation in general and organic chemistry followed by the essential features of organic chemistry, which lays the groundwork for the study of the biochemistry of living systems. Students are afforded the opportunity to expand their knowledge through classroom discussion and through laboratory work. The laboratory experiments are designed in some cases to introduce specific principles and in other cases to supplement and reinforce material introduced in lecture. Prerequisite: None.

CHM 104 Organic and Biochemistry

3 2 0 4

This course is to familiarize the student with the nomenclature, variety, usefulness, and most significant topics in organic and biochemistry. Prerequisite: CHM 103.

CIV 105 Architectural Materials and Methods

3 2 0 4

This course emphasizes materials used in the construction of architectural structures. Field trips to construction sites and study of manufacturer's specifications for materials, properties, standard sizes of structural materials, and construction techniques are included. Prerequisite: None.

CIV 218 Plain Concrete

3 0 0 3

This course is a study of the composition and properties of concrete, including cementing agents, aggregates, admixtures, and air entrainment; design and proportioning of

concrete mixes to obtain predetermined strengths and properties; methods of placing and curing concrete; and standard control tests of concrete. Prerequisite: None.

DFT 101 Technical Drafting I

2 0 6 4

The field of drafting is introduced as the student studies the basic principles of the graphic language. Skills are developed in freehand lettering, geometric figure construction, orthographic and pictorial freehand, and instrument drawing of the principle views of objects as they are represented in the graphic language. Principles of size description are also introduced. Prerequisite: None.

DFT 102 Technical Drafting II

2 0 6 4

This course includes the application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, and the introduction to sections and conventions. Dimensioning practices for details and working drawings as approved by the American Standards Association are covered. Prerequisite: DFT 101.

DFT 103 Technical Drafting III

2 0 6 4

This course is a study of the various techniques employed to produce and render isometric and oblique drawings and isometric, dimetric, and trimetric projections. An introduction to screw threads and various fasteners is included. Prerequisite: DFT 102.

DFT 106 Architectural Drafting I

2 0 6 4

This is a course designed to provide fundamental knowledge of the principles of drafting. Basic skills and techniques of drafting include use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, and orthographic instrument drawings of principal views. Projection problems dealing with principles of descriptive geometry involving points, lines, planes, connectors, and the principles of planning drafting are introduced. Prerequisite: None.

DFT 107 Architectural Drafting II

2 0 6 4

This course develops techniques in architectural lettering, symbols and their interpretation, dimensioning and freehand, and instrument drafting. Drawings of construction details, using appropriate material symbols, connections, sections, scale details, and full-size details are prepared from preliminary sketches. Applications of descriptive geometry used in visualization and analytical solutions of the drafting problems involving auxiliary views, intersections, and developments are also included. Prerequisite: None.

DFT 108 Architectural Drafting III

0 0 9 3

This course includes the development of design and programming skills spplied to realistic situations and the introduction to rendering and projections. Prerequisite: None.

DFT 113 Blueprint Interpretation — Mechanical

3 0 0 3

This course is a study of graphical methods and techniques used in expressing, interpreting, and communicating engineering ideas. Prerequisite: None.

DFT 150 Site Planning

2 0 6 4

This course provides an introduction to factors influencing placement of buildings on sites and specific analysis of sites in terms of solar, topographic, use, and wind characteristics. Field work in surveying is also included. Prerequisite: None.

DFT 151 Computer Graphics

2 0 0 2

This is a course designed to provide fundamental knowledge of the principles of computer graphics. Basic skill and techniques of basic programming with respect to graphic application being taught are also covered. Corequisite: DFT 101 or DFT 106.

DFT 181 History of Architecture and Construction

0 0 5

This course covers the evolution of building development from primitive to modern and the history of architectural construction and design. The principal periods studied include Prehistory, Ancient Egypt and Mesopotamia, Greece, Rome, Romanesque, Gothic, Renaissance, and Early American. Prerequisite: None.

DFT 204 Descriptive Geometry

3 0 3 4

This course covers a graphic analysis of space problems involving points, lines, planes, connectors, and a combination of these. Practical design problems are stressed with analytical verification where applicable. Visualization is stressed on every problem. Prerequisite: DFT 101.

DFT 205 Design Drafting I

2 0 6 4

This course is an introduction to inking, welding symbols and methods of representing and specifying them, and basic design in the study of motion and transfer mechanisms as they relate to power trains. The principles of design sketching, design drawing, layout drafting, detailing from layouts, production drawings, simplified drafting practices, and the types and methods of specifying materials and workmanship are integral parts of the course. Prerequisite: DFT 102.

DFT 206 Design Drafting II

2 6 0 4

This course is an introduction to piping drawings and research to solve a problem in design by consulting various manuals, periodicals, and laboratory experiments. A written technical report, preliminary design sketches, layout drawings, detail drawings, assembly, and subassembly drawings and specifications are required as a part of the program. Prerequisites: DFT 205 and DFT 260.

DFT 211 Mechanisms

3 0 3 4

This course includes mathematical and drafting room solutions of problems involving the principles of machine elements; a study of motions of linkages, velocities, and acceleration of points within a link mechanism; and layout methods for designing cams, belts, pulleys, gears, and gear trains. Prerequisites: DFT 206, MAT 103, and MEC 104.

DFT 212 Jig and Fixture Design

3 0 6 5

This course covers commercial standards, principles, practices, and tools of jig and fixture design. Individual project and design work to acquaint students with the types of jigs and fixtures and their design is also included in the course. Prerequisites: DFT 211 and DFT 223.

DFT 220 Architectural Drafting IV

2 0 9 5

This course covers the drawing of structural plans and details as prepared for building construction, including steel, concrete, and timber structural components. Appropriate details and drawings necessary for construction and fabrication of structural members and reference materials used to provide the draftsman with skills and knowledge in locating data and in using handbooks are also included. Prerequisite: None.

DFT 221 Architectural Drafting V

2 0 9 5

This course provides an in-depth approach to the study of architectural drafting, continuing the study of details of construction, and introducing the elements of mechanical and electrical equipment systems and their relationship to a finished building. Prerequisite: DFT 220.

DFT 222 Architectural Drafting VI

2 0 9 5

The preparation of the complete set of working drawings for the architectural structure, the preparation of millwork drawings, cabinets and built-in equipment detail drawings, and door, window, and room schedules are required. Site and landscaping plans are studied and drawn. A final assembly of the complete document for construction purposes is required. Prerequisite: DFT 221.

DFT 223 Design Drafting III

3 0 6 5

This course covers the fundamentals of punch and die design, commercial standards and principles of blanking, piercing, bending, and forming dies, including compound and progressive dies. The electromechanical drawings of printed circuits, wiring diagrams, and schematics are also included. Prerequisite: DFT 206.

DFT 224 Product Design

1 0 3 2

This course brings together the original idea, scientific theory involved, applicable product history, limiting manufacturing boundaries, aesthetic importance, and marketability considered with study given to relative importance and intended design goal. Prerequisites: DFT 211 and DFT 223.

DFT 225 Computer Graphics Design

1 0 3 2

This is a course in advanced computer graphic applications with an emphasis placed on project design. The student will have the opportunity to program, plot, store information, and use current data bases. Two-dimensional and three-dimensional graphic applications will be used to produce a finished engineering drawing. Prerequisites: DFT 221, DFT 223, and DFT 251.

DFT 233 Office Practice Seminar

2 0 0 2

This course provides a study of the professional relationship of the architectural firm in relation to clients, contractors, suppliers, consultants, and other architects. The ethics of the professional as applicable to the draftsman's role in the architectural firm are stressed. Prerequisite: None.

DFT 235 Codes, Specifications, and Contract Documents

3 0 3 4

Building codes and their effect in relation to specifications and drawings, the purpose and writing of specifications are studied, along with their legal and practical application to working drawings. Contract documents are analyzed and studied for the purpose of client-architect-contractor responsibilities, duties, and mutual protection. Prerequisite: None.

DFT 236 Construction Estimating and Field Inspecting

3 0 3 4

This course provides an interpretation of working drawings for a project, preparation of material and labor quantity surveys from plans and specifications, and approximate and detailed estimates of cost. A study of materials takeoff, labor takeoff, subcontractor's estimates, overhead costs, and bid and contract procedures, and a detailed inspection of the construction by comparing finished work to the specifications are also included. Prerequisite: None.

DFT 250 Architectural Media I

3 0 0 3

This course will give the student a basic understanding of the use of photography, sketching, rendering, model building, and the combination of graphic arts in the presentation of architectural design. Prerequisite: None.

DFT 251 Architectural Media II

4 0 3

This course will teach the student to present mood, atmosphere, pictorial surroundings, and an indication of activity that shows functional purpose to the architectural rendering or illustration. To accomplish this, the study of the various media and techniques will be undertaken and developed by the student. The use of color, light, and shadow to enhance the presentation will be stressed. Prerequisite: DFT 250.

DFT 255 Twentieth Century Architecture

3 0 0 3

This course will cover student awareness, consideration, and criticism of the diverse forces on the aesthetic, constructional, and design theories active in the field of architecture today, and the evolution of building development from the late 1800's to present. Primary master builders studied are Le Corbusier, Frank Lloyd Wright, and Robert Venturi. Prerequisite: None.

DFT 260 Dimensioning and Tolerancing

0 3 2

The course covers Standard Drafting Practices per USASIY 14.5. It includes general dimensioning, general applications of tolerance and limits, tolerance of position and form, and advantages of true position tolerancing. Prerequisite: DFT 103.

DFT 1101 Schematics and Diagrams

0 3 1

This course develops the student's ability to read and interpret blueprints, charts, and instruction and service manuals. Also included in the course is information on the basic principles of lines, views, dimensioning procedures, and notes. Prerequisite: None.

DFT 1104 Blueprint Reading: Mechanical I

0 0 3 1

This course covers the interpretation and reading of blueprints and information on the basic principles of the blueprint, lines, views, dimensioning procedures, and notes. Prerequisite: None.

DFT 1105 Blueprint Reading: Mechanical II

0 0 3 1

This course includes further practice in interpretation of blueprints as they are used in industry, study of prints supplied by industry, making plans of operations, introduction to drafting room procedures, and sketching as a means of passing on ideas, information, and processes. Prerequisite: DFT 1104.

DFT 1106 Blueprint Reading: Mechanical III

0 0 3 1

This course provides advanced blueprint reading and sketching as related to detail and assembly drawings used in machine shops and the interpretation of drawings of complex parts and mechanisms for features of fabrication, construction, and assembly. Prerequisite: DFT 1105.

DFT 1107 Blueprint Reading

1 0 3 2

This course includes interpretation and reading blueprints applicable to air conditioning, heating, and refrigeration. The development of an ability to read and interpret floor plans, elevations, sections, and details found on pictorial, perspective, isometric, oblique, and three-view drawings is covered. Prerequisite: None.

DFT 1110 Blueprint Reading I

0 0 3 1

This course covers the principles of interpreting blueprints and trade specifications common to the building trades. The development of proficiency in making three-view and pictorial sketches is included. Prerequisite: None.

DFT 1111 Blueprint Reading II

0 0 3 1

This course covers the principles of interpreting blueprints and specifications common to the building trades. Practice in reading details for grades, foundations, floor plans, elevations, walls, doors, windows and roofs of buildings, and the development of proficiency in making three-view and pictorial sketches, and estimating from blueprints are covered. Prerequisite: None.

DFT 1112 Drafting I: Plumbing

1 0 3 2

This course includes a review of blueprint reading; instruction in the selection, use, and care of basic drafting instruments; single-stroke freehand lettering; orthographic projection consisting of instruments and freehand sketching; and a study of dimensioning and note practices with reference to the American Standard Association practices. The methods of reproducing drawings; detail assembly, layout and pictorial drawings; and specifications, parts list, and bill of materials are covered. The drawings of piping include metal pipe, tubing, plastic pipe, pipe joints, tube joints, pipe fittings, and valves; specification of fittings, pipe threads, and specification of threads; scale layout (two-line drawing) and diagrammatic (single-line drawing), (diagrammatic methods include orthographic, developed, and pictorial); standard symbols; dimensioning of a pipe drawing, and pipe hangers and supports. The student's work includes various problems of piping layout to scale. (Note: School will furnish drafting equipment.) Prerequisite: None.

DFT 1113 Blueprint Reading: Electrical

0 0 3 1

This course covers the interpretation of schematics, diagrams, and blueprints applicable to electrical installation with emphasis on electrical plans for domestic and commercial installations using appropriate symbols and notes according to the applicable codes. Prerequisite: None.

DFT 1117 Blueprint Reading: Welding

0 0 3 1

This course is a study of mechanical blueprints and sketches in which welding procedures are indicated. Interpretation, use, and application of welding symbols, abbreviations, and specifications are emphasized. Prerequisite: DFT 1104.

DFT 1121 Drafting I

4 0 12 8

This course is an introduction to drafting and the study of drafting practices. Instruction is given in the selection, use and care of instruments, single-stroke lettering, and applied geometry, and freehand sketching consisting of orthographic and pictorial drawings. The emphasis is on orthographic projection, reading, and instrument drawing of principal views, single auxiliary views (primary), double (oblique) auxiliary views, and the study of dimensioning and note practices with reference to the American Standards Association practices. Methods of reproducing drawings are included at the appropriate time. Prerequisite: None.

DFT 1122 Drafting II

4 0 12 8

This course includes a study of simple and successive revolutions and their application to practical problems; a study of sections and conventions; drawing of both detail and assembly sections: and a study of intersections and developments by relating the

drawing to the sheet metal trades. Models of the assigned drawings are made from construction paper, cardboard, or similar materials as a proof of the solution to the problems drawn. The methods of drawing and projecting axonometric, oblique, and perspective drawings with emphasis on the practical applications of pictorial drawings are covered. The introduction of various methods of shading and performance of dimensioning and sectioning of oblique and axonometric pictorials is also included. Prerequisite: None.

DFT 1125 Descriptive Geometry

2 0 3 3

This course covers the graphical analysis of space problems, problems dealing with practical design elements involving points, lines, planes, connectors, and a combination of them, problems dealing with solid geometry theorems, and problems with analytical as well as graphic solutions. Prerequisite: DFT 1121.

DFT 1141 Drafting III

4 0 15 9

This course provides an introduction to architectural drafting; further development of techniques in lettering, dimensioning, freehand sketching, and instrument drawings; drawings of construction details, using appropriate material symbols and convention; working drawings, including plans, elevations, sections, scale details, and full-size details prepared from preliminary sketches. Prerequisite: DFT 1122.

DFT 1142 Drafting IV

4 0 15 9

This course provides individual and group participation in the preparation of complete working drawings for a complex architectural structure, a study of drafting room organization, and relationships of personnel within the architectural office. Prerequisites: DFT 1141, DFT 1143, and DFT 1144.

DFT 1143 Building Mechanical Equipment

3 0 0 3

This course includes a general study of heating, air conditioning, plumbing, electrical equipment, materials, symbols, building code requirements pertaining to residential and commercial structures, and the reading and interpretation of working drawings by mechanical engineers. Prerequisite: DFT 1122.

DFT 1144 Building Materials and Methods

3 0 0 3

This course covers the study of materials used in the construction of architectural structures, their economic values and limitations affected by locality, budget and codes, field trips to construction sites, and the study of manufacturer's specifications for materials. Standard sizes of structural materials and modular construction techniques are also included. Prerequisite: None.

DFT 1150 Site Planning

2 0 3 3

This course is an introduction to factors influencing placement of buildings on site, a specific analysis of sites in terms of solar, topographic, use, and wind characteristics. Field work in surveying is also included. Prerequisite: None.

DSL 1101 Diesel Engines

4 0 15 9

This course provides the development of a general understanding of the basic principles involved in the construction and operation of diesel engines as well as the thermodynamic concept of cycles related to the diesel engines. An elementary study of performance characteristics of diesel engines and basic design in fuel systems is covered. Student work includes such overhaul jobs as grinding valves, gaging cylinder wear, removing and replacing cylinder liners, boring cylinders, replacing and adjusting bearings, and gaging and installing piston rings. Prerequisite: None.

DSL 1102 Diesel Electrical Systems

4 0 15 9

This course is designed to familiarize the student with the construction and operational features of the electrical units which are used on preheating, starting, and generating systems of diesel engines. There are also student activities in reconditioning techniques of generators, starters, and alternators. Use of test equipment for measurement, adjustment, and troubleshooting is included. Prerequisite: None.

DSL 1103 Diesel Fuel Injection

2 0 6 4

This course covers the theory related to a study of the variations in design and the principles of operation of fuel injection systems used on the automotive diesel engine. The practice work is designed to familiarize the student with the operation, maintenance, and testing of the units which comprise the fuel injection systems of diesel engines, and teach the student to maintain, repair, and test such units as fuel pumps, transfer pumps, spray nozzles, and unit injectors. Prerequisite: None.

DSL 1104 Power Trains, Chassis, and Suspension Systems 4 0 15 9

Instruction is given in the construction features and operating principles of truck chassis, suspension, steering, and brake systems. The student is taught to operate equipment and to correct and adjust abnormalities in suspension and steering. Familiarization with the variations in design and functioning of brake systems as used by heavy trucks and the study of the construction and operation of such component parts as clutches, transmissions, propeller shafts, and rear axles are covered. Prerequisite: None.

DSL 1105 Diesel Servicing

5 0 15 10

This course is intended for those who desire to become proficient in the field of diesel diagnosis and repair. Vehicles are first given a complete checkout to determine the trouble, and the trouble is corrected on the basis of the diagnostic report. Training is provided on all major mechanical and electrical units. Preventive maintenance and servicing techniques are taught as recommended by manufacturers. Prerequisite: None.

ECO 102 Economics I

3 0 0 3

Economics I is a study of macroeconomics, which treats the economy as a whole. It is a study of Gross National Product, full employment, business fluctuations, economic growth, and the expansion of bank credit. Prerequisite: None.

ECO 104 Economics II

3 0 0 3

This course is a further study into the function of the United States economy as well as a look into world economics. Areas of study include prices, competition, nonprice competition, and income distribution in the United States. The course also includes a study of international trade and payments, economic development, and comparative economic systems. Prerequisite: ECO 102.

ECO 108 Consumer Economics

3 0 0 3

Consumer economics is designed to help the student use his/her resources of time, energy, and money to get the most out of life. It gives the student an opportunity to build useful skills in buying, managing finances, increasing resources, and better understanding the economy. Prerequisite: None.

EDP 100 Introduction to Data Processing

3 2 0 4

This course is an introductory course for students in the data processing curriculum. It is a technical study of the history, terminology, equipment, and concepts of data process-

ing. Laboratory exercises will be used to familiarize the student with data processing equipment and hypothetical programming languages. Prerequisite: None.

EDP 101 Principles of Business Data Processing

3 2 0 4

This is an introductory course designed to acquaint the student with the field of data processing. It includes a historical review of data processing, basic terminology, and fundamental concepts of data processing and programming. Laboratory exercises are devoted to familiarizing the student with basic data processing equipment. Prerequisite: None.

EDP 102 Logic and Decision Making

5 0 0 5

This course is an introduction to symbolic logic and the application of logic to decision making and programming. It includes simple and compound logic statements, implications and equivalences, and flowcharting techniques. Laboratory exercises involve the development of truth tables and the translation of basic problems into flowcharts. Prerequisite: None.

EDP 103 Introduction to Microcomputing

3 0 0 3

This course is designed to offer the student with no previous data processing background an introduction to the use of microcomputers. A study of concepts, hands-on experience, and lab sessions will allow the student to develop an adequate degree of microcomputer literacy. Prerequisite: None.

EDP 105 Assembly Language Programming I

5 2 0 6

This course is an introduction to the study of assembly language programming. It includes assembly language specifications, operations, and rules for writing source programs. The laboratory exercises are devoted to developing program logic and writing assembly language programs to solve sample problems. Prerequisites: EDP 100 and EDP 102. Corequisite: MAT 111.

EDP 106 Assembly Language Programming II

2 4 0 4

This course is a continuation of the study of EDP 105 Assembly Language Programming I. It covers the more complex features of the language and more advanced programming techniques. The laboratory assignments are devoted to developing program logic and writing assembly language programs to solve sample programs. Prerequisite: EDP 105.

EDP 110 COBOL Programming I

3 2 0 4

This course is an introductory course in compiler language programming utilizing COBOL. It includes COBOL concept, components, structure, and basic instructions. The laboratory assignments stress development of program logic and writing COBOL programs to solve sample problems. Prerequisites: EDP 100 and EDP 102. Prerequisite or Corequisite: MAT 111.

EDP 111 COBOL Programming II

2 4 0 4

This course is a continuation of the study of COBOL. It includes more complex COBOL instructions and techniques. The laboratory exercises stress developing program logic and writing programs to solve simulated industrial and business problems. Prerequisite: EDP 110.

EDP 112 COBOL Programming III

2 4 0 4

This course is a continuation of the study of COBOL emphasizing the more complex features of the language, efficient programming techniques, and debugging techniques.

niques. The laboratory exercises stress developing program logic and writing programs to solve simulated business and industrial problems. Prerequisite: EDP 111.

EDP 120 Introduction to Computer Programming

3 2 0 4

This course is a nontechnical introduction to the COBOL programming language. Instruction includes how COBOL is used in business to automate business procedures. The laboratory exercises will be used to develop COBOL programs that can solve business problems. Prerequisite: EDP 101.

EDP 201 Computer Systems

3 2 0 4

This is a study of computer systems involving such topics as job scheduling, file devices, file organization, operating systems, job control language, and multiprogramming. Prerequisites: EDP 105 and EDP 110.

EDP 205 Systems Design and Analysis

3 2 0 4

This course is designed to give the student training in systems design and analysis. Instruction in the classroom and the laboratory will be on problem definition, file organization, effective retrieval and manipulation of information, and systems design techniques. Prerequisite: EDP 111.

EDP 208 Advanced Programming

3 2 0 4

This course is designed to acquaint students with complex programming activities and refined programming techniques. The major language to be used is that of COBOL since most business data processing installations utilize this language for most program development. Concepts included in the Computer Systems and Systems Analysis courses will be further developed. Prerequisites: EDP 112, EDP 201, and EDP 205.

EDP 210 Language Survey

2 0 0 2

This course is a survey and comparative study of various computer languages in current use. It stresses the evaluation of languages in terms of utilization in various business applications. Prerequisite: EDP 208.

EDP 220 Research Project

1 8 0 5

This course is designed to give the student an opportunity to initiate and carry out a carefully selected project. The student is given the responsibility to solve a significant problem with a minimum of assistance from the instructors. Prerequisite: EDP 208.

EDP 230 Introduction to FORTRAN

3 2 0 4

This course is an introduction to FORTRAN, a problem-oriented language. The laboratory exercises are devoted to the developing of program logic and writing programs using FORTRAN. Prerequisites: EDP 100, EDP 102, and MAT 112.

EDP 240 PL/1 Programming I

3 2 0 4

This course is an introduction to PL/1 programming. It includes basic PL/1 concepts, components structure, and instructions. The laboratory assignments are devoted to developing program logic and writing programs using PL/1. Prerequisites: EDP 100 and EDP 102.

EDP 250 RPG Programming

3 2 0 4

This course is an introduction to RPG programming. The laboratory exercises are devoted to developing program logic and writing programs in RPG to solve simulated business problems. Prerequisites: EDP 100 and EDP 102.

EDU 101 Child Growth and Development

6 0 0 6

This course is the study of the mental and physical growth of the child from birth through adolescence. Through a brief review of recent studies in child development, the student will gain knowledge of frequently used educational research methods and research terminology. Prerequisite: None.

EDU 102 Programs for Young Children

4 2 0 5

This is a comparative study of traditional, current, and innovative preschool programs. The laboratory experience provides opportunities for the students to observe and record the growth and behavior of young children. Prerequisites: EDU 101.

EDU 103 Working with Young Children

4 0 10 5

Case presentations, film observations, and group discussions are utilized to study characteristic behaviors of each level of development and to derive guidelines for promoting desirable behaviors and for coping with undesirable behaviors. Laboratory experiences will provide opportunities to develop observation skills, effective techniques, and beginning skill in adapting activities to the needs of individual children. Prerequisite: EDU 102.

EDU 104 Art for Young Children

3 0 0 3

This course is a study of the art of young children and the development of techniques of working with young children to encourage creative expression through a variety of media. Prerequisite: EDU 103.

EDU 105 Music and Creative Movement for Young Children

0 0 3

This course is an exploration of a wide variety of musical activities for young children with special emphasis on techniques of selecting activities appropriate to the age level and the individual needs of the children. Prerequisite: EDU 103.

EDU 106 Activities for Young Children: Science and Math

5 0 10 6

This is individual and group exploration of activities and materials for developing mathematics and science experiences for preschool children, which would permit the children to learn through manipulation, experimentation, and discovery. The laboratory experience provides opportunities to implement activities with children. Prerequisite: EDU 112.

EDU 107 Communicating with Young Children

3 2 0 4

This is a course designed to improve the verbal and nonverbal communication of students working with small children in the child care centers. Special emphasis is on voice and diction improvement (pronunciation, articulation, audibility, rate, pitch, and usage) with extensive use of cassette and videotape recordings. Emphasis is also placed upon developing a student's confidence in using a variety of audiovisual equipment (tape recorder, 16mm projector, filmstrip projector, record player, etc.) in preparation for a class activity such as telling or reading a story. Each student will be given a laboratory assignment for communication experiences with groups of small children. Prerequisite: ENG 100.

EDU 108 Social Studies in Early Childhood

3 0 0 3

This is a study of the social studies phenomena that are of interest to young children. Classroom experiences will be designed to teach the student to use social studies as an integral component of the overall program for young children. Prerequisite: None.

EDU 109 Physical Activities: Games for Young Children

2 2 0 3

This is an exploration of activities for promoting optimal overall physical development of young children, with special emphasis on body movements (exercise, dance, and games). The lab time is devoted to implementing games with children. Prerequisite: None.

EDU 110 Instructional Media and Resources

2 0 3 3

This course is a survey of media and appropriate learning materials for young children. It includes a study of the role of instructional media and resources in teaching and learning, and sources of free, inexpensive material. Directed practicum time is used to construct and prepare appropriate teaching aids to use with children to help conceptual development. Prerequisites: EDU 101, EDU 102, and EDU 103.

EDU 112 Language Arts in Early Childhood

3 0 0 3

This course is a comprehensive study of each facet of language arts with emphasis on techniques of designing activities and selecting materials to promote optimal overall development and to meet the specific needs of individual children. Prerequisite: None.

EDU 113 Health and Safety for Young Children

3 2 0 4

This is a study to promote understanding of factors which influence physical and emotional health of infants and young children. Emphasis will be given to preventative measures such as designing a safe and stimulating outside play area. The course will embrace first aid techniques and allow for observation of children in play situations. The influence of child care workers on health and safety and on the teaching of health habits is emphasized. Prerequisite: None.

EDU 202 Seminar Co-op in Early Childhood

5 0 10 6

This course provides experience in a variety of child care settings to develop further skill in working with young children, in assisting with programming activities, and in adapting to the needs of individual children. Analysis of individual problems encountered in working with specific age groups will be studied. Prerequisite: EDU 106.

EDU 203 The Exceptional Child

3 2 0 4

This is a study of children with developmental variations requiring modification in activities. Consideration is given to recognition of problems, community resources, and appropriate activities for the child with exceptional deviations in personality or physical development. Prerequisites: PSY 102, PSY 105, PSY 205, and EDU 106.

EDU 204 Parent Education

3 0 0 3

This is a study of ways parents can be involved in the child development center, of the purpose and value of home visitation, and of techniques for reporting child progress to parents. The role of the early childhood specialist in aiding parents in guidance of the child's development is emphasized. Each student will develop a series of programs appropriate for presentation to the parents of preschool children. Prerequisite: EDU 103.

EDU 206 Special Problems

3 0 0 3

This course is a directed study of a specialized area of early childhood appropriate to individual career interests of students. Prerequisite: EDU 202.

EDU 211 Practice Teaching

4 0 20 6

This is a study to give the student practice in the care of the young child. This course will

give the student more experiences in directing preschool activities. Students spend a major time block caring for and guiding young children. Opportunities to carry out planned units of study will be allowed the student in this quarter. Prerequisites: Successful completion of all practicums and permission of department chairperson.

ELC 101 Fundamentals of Electricity I

5 2 6 8

The principles of electricity including basic electric units, Ohm's Law, Kirchhoff's Law, network, theorems, magnetics, inductance, capacitance, sine wave analysis, and nonresonant resistive, inductive, and capacitive networks are studied. Prerequisite: None.

ELC 102 Fundamentals of Electricity II

5 2 6 8

Series and parallel resonant-circuits analysis, resonant and nonresonant transformer analysis, basic diode power supply analysis, introduction to nonlinear resistive control devices, and introduction to electromechancial devices are studied. Prerequisites: ELC 101 and MAT 101.

ELC 1111 Applied Electricity II

3 2 0 4

The fundamental concepts of alternating current, including a study of capacitive and inductive effects and resulting phase angle, are covered. A study of power, current, voltage, and impedance in the AC circuit as applied to AC power machinery and control devices relating to heating and refrigeration systems are also included in the course. Prerequisite: None.

ELC 1120 Direct and Alternating Current

8 8 6 14

The course includes a study of the structure of matter and the electron theory; the relationship between voltage, current, and resistance in series, parallel, and series-parallel circuits; analysis of direct current circuits by Ohm's Law and Kirchhoff's Law; sources of direct current potentials; fundamental concepts of alternating current flow; a study of reactance, impedance, phase angle, power, and resonance; and alternating current circuit analysis. Prerequisite: None.

ELC 1121 Electrical Installation Fundamentals

5 0 15 10

This is an introduction to the field of electrical installation. Instruction will include a course overview, use of hand tools, wiring layouts, practice wiring, safety, and the National Electrical Code. Prerequisite: None.

ELC 1122 Residential Wiring I

4 0 15 9

The techniques learned in ELC 1121 Electrical Installation Fundamentals will be applied to actual wiring. Other subjects covered will include material take-off, power tools, and electrical calculations. The study of the electrical code will be continued. Prerequisite: ELC 1121.

ELC 1123 Residential Wiring II

5 0 15 10

This is a continuation of ELC 1122 Residential Wiring I. Practice wiring will be continued. Other subjects covered will include interpretation of specifications, electrical contracts, switch gear, and electrical design. The study of the electrical code will be continued. Prerequisite: ELC 1122.

ELC 1125 Commercial and Industrial Wiring

6 0 15 11

This course covers layout, planning, and installation of wiring systems in commercial and industrial complexes, with emphasis upon blueprint reading and symbols, the

related National Electrical Codes, and the application of the fundamentals to practical experience in wiring, conduit preparation, and installation of simple systems. Prerequisite: ELC 1123.

ELN 110 Transistor Applications

5 2 6 8

This course is devoted to transistor operations as a discrete control device. The content includes biasing and dynamic analysis of the common-emitter, common-collector, and common-basic configurations as they apply to amplifiers and oscillators. Some general consideration is given to the field effect transistor. Prerequisites: ELC 102 and MAT 102.

ELN 210 Linear Integrated Circuits

5 2 6 8

This course is an extensive study of linear integrated circuits such as differential amplifiers, operational amplifiers, regulators, timers, and phase lock loops. Emphasis is placed on OP amp applications as they apply to waveshaping, amplifiers, oscillators, and filters. Prerequisite: ELN 110.

ELN 219 Digital Fundamentals

5 0 6 7

This is a beginning course in logic and digital circuits, which includes number systems, logic gating systems, Boolean algebra, flip-flops, one-shot multivibrators, registers, counters, and data displays. Prerequisites: ELN 110 and ELN 210.

ELN 220 Digital Systems

4 0 6 6

This is a continuing course in digital electronics which deals primarily with subsystems that are common to many complex digital systems. Included are multiplexing data and displays, computer arithmetic, memory systems, keyboard entry systems, analog-to-digital converters, and digital-to-analog converters. Some consideration is given to a wide variety of digital measuring systems such as frequency counters, time clocks, tachometers, and thermometers. Prerequisite: ELN 219.

ELN 235 Industrial Electronics I

5 0 6 7

This course is a study of a wide variety of transducers, such as pressure, temperature, light, and velocity as they apply to industrial control devices. Prerequisite: ELN 210.

ELN 236 Industrial Electronics II

3 0 6 5

This course is a study of electromechanical devices, including electric motors and generators, motor starters, and contractors. Also, servo systems and three-phase power distribution are covered. Prerequisite: ELN 235.

ELN 245 Electronic Design Project

2 0 6 4

The course is devoted entirely to the development, testing, and evaluation of an electronic design project using all of the skills and knowledge which the student has acquired thus far. Research and development procedures are emphasized in developing a prototype. Prerequisites: ELN 210 and ELN 219.

ELN 247 Electronic Systems: Computers

4 0 6 6

This course consists of a functional block diagram analysis of a microcomputer system currently used in industry. Classroom activity includes flow charting and the use of the instruction set in writing programs in machine language. The lab will provide practice in manipulating the hardware and software associated with such computers. Prerequisite: ELN 219.

ELN 1118 Industrial Electronics

3 0 3 4

This is a general introduction to the field of electronics with special emphasis on industrial applications. This course is designed to help the nonelectronic vocational student understand the basic principles of electronics as applied in a modern industrial setting. After a review of DC and AC theory, the student will see digital electronics applied in the control of motors. In addition, the student will receive a brief introduction to process control and various transducers. Prerequisite: None.

ELN 1121 Solid State Devices and Circuits

6 4 6 10

This is a course in solid state theory and the servicing of AM and FM radio and stereo receivers. Devices to be studied include the diode, transistor, FET, Zener diode, and the VCO as circuit components. The circuits studied are multiplexing and decoders. An introduction to troubleshooting of AM, FM, and FM stereo receivers is included. Prerequisite: ELC 1120.

ELN 1122 Transistor Theory and Circuits

4 4 3 7

This is a course in semiconductor theory. Devices to be studied include the diode, transistor, FET, Zener diode, SCR, UJT, and integrated circuits. Circuits studied in lecture and laboratory sessions include power supplies, tuned amplifiers, audio amplifiers, oscillators, and detectors. An introduction to systems troubleshooting is included. Prerequisite: ELC 1120.

ELN 1123 Black and White Television Servicing

10 6 9 16

The course covers a study of black and white television receivers, a detailed study of all circuits of the TV receiver in classroom and laboratory sessions, and supervised servicing practice to develop skills in using test equipment to repair and maintain television receivers. Prerequisites: ELN 1121 and ELN 1122.

ELN 1124 Color Television Servicing

10 8 9 17

The course includes theory of operation of the television circuits peculiar to color receivers, composite color telecasting signals, color receiver detectors, kinescopes, convergence, and matrix networks. The theory of operations and practical test bench techniques, including troubleshooting, alignment, and convergence, are covered. Prerequisite: ELN 1123.

ENG 001 Spelling

3 0 0 0

The course in basic spelling will emphasize the relationship of symbols to their corresponding sounds. It will stress spelling rules, mnemonics, and techniques in the perceiving of sounds and retaining the memory for words as a configuration. Proofreading and dictionary use will also be emphasized. Prerequisite: None.

ENG 005 Language Development I

2 2 0 0

This is the first in a series of courses which concentrates on basic reading skills that enable a student to analyze words through phonetic word attack. Prerequisite: Recommendation by the department chairperson.

ENG 006 Language Development II

2 2 0 0

This is a continuation and specialization in language skills. Prerequisite: Recommendation by the department chairperson.

ENG 007 Language Development III

2 2 0 0

This is a continuation and specialization in language skills. Prerequisite: Recommendation by the department chairperson.

ENG 008 Language Development IV

2 2 0 0

This is a continuation and specialization in language skills. Prerequisite: Recommendation by the department chairperson.

ENG 010 Basic Writing Skills

5 0 0 0

Designed to reinforce the writing skills of those students who are not ready to attempt successfully the materials in ENG 101 Introduction to Written Communication, this course enables the student to develop competency in grammar, sentence structure, punctuation, flow of writing, and proofreading. Prerequisite: ENG 021 or ENG 001 if diagnostic tests indicate a need for these courses.

ENG 021 Basic Reading Skills and Vocabulary I

3 0 0 0

This basic reading course is structured to enable a student who is experiencing decoding difficulties to improve his word attack skills. Dictionary usage, comprehension, and vocabulary development will also be included. Prerequisite: Recommendation by the department chairperson.

ENG 022 Basic Reading Skills and Vocabulary II

3 0 0 0

This course is designed to enable the student to develop the ability to analyze words and to increase his vocabulary. Major emphasis will be placed on developing comprehension skills to a level adequate to perform in his curriculum program. Prerequisite: Demonstration of a minimum proficiency in comprehension and word attack skills as determined by the departmental test battery or the CGP cutoff scores.

ENG 023 Basic Reading Skills III

3 0 0 0

This course is an advanced reading course that stresses speed and accuracy in reading comprehension with emphasis on attaining satisfactory performance levels on standardized tests. Additional topics to be studied include test-taking techniques, vocabulary building, and reading in the content areas. Prerequisite: Demonstration of an 11+ grade reading level based on a departmental standardized test or successful completion of ENG 022.

ENG 100 Oral Communication

3 0 0 3

This course provides the student the opportunity to improve his skills for public speaking, interpersonal communication, and group participation. Included are formal and informal speeches, class exercises, and conferences. Prerequisite: None.

ENG 101 Introduction to Written Communication

3 0 0 3

This course provides a review of basic English grammar and frequent writing exercises which require the student to apply the principles of standard English usage. Assignments provide experience in combining ideas into sentences and in composing paragraphs and short essays using a variety of methods of development. Prerequisite: ENG 010 or passing score on screening tests.

ENG 102 Composition

3 0 0 3

This course will give the student training and practice in writing and thinking through work in the basic logical modes: analysis, comparison and contrast, definition, persuasion, etc. The student will study these various methods of presentation and will then

apply the techniques in full-length compositions. The student will also prepare a library research paper. Prerequisite: ENG 101.

ENG 103 Technical Report Writing

3 0 0 3

The fundamentals of English are utilized as background for the organization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques and graphic devices, are completed by the student. Practical application includes the preparation of a technical report which is related to the student's chosen curriculum. Prerequisites: ENG 102 and enrolled in third quarter (minimum) of curriculum or by permission of ENG 103 instructor.

ENG 115 Appreciation of Literature

0 0 3

The student will sample the literary genres of prose and poetry drawn from varied cultures and periods. He will analyze different styles and techniques of writing used in some of the masterpieces of literature. Prerequisite: None.

ENG 116 Children's Literature

3 0 0 3

This is a survey of literature for young children. The student will gain an appreciation and awareness of a variety of types of literature to be presented to the child during the preschool years. Prerequisite: EDU 112.

ENG 200 Advanced Speech

3 0 0 3

This course is designed for the student who wishes to polish his speaking skills beyond the level achieved in ENG 100 Oral Communication. The student receives instruction in the preparation and delivery of longer oral presentations and in the principles of argumentation with some practice in informal debate. Analysis of famous speeches is also included. Prerequisite: ENG 100.

ENG 205 Business Report Writing

0 0 3

The business report is influential in decision making, and the writing phases involved in planning, organizing, and preparing this report are the major contents of the course. Memoranda of various types and a formal report are studied. Prerequisite: ENG 102.

ENG 206 Business Communications

3 0 0 3

This course develops skills in techniques in writing business communications. Emphasis is placed on writing letters of claim, adjustment, credit, collection, sales, application, and other specific types of business letters. Prerequisite: ENG 102.

ENG 207 Educational Report Writing

3 0 0 3

This is a written communication course stressing business letters, memos, reports, and employment interviewing. Special emphasis will be on types of communication written in child care centers, anecdotal records, school newsletters, progress letters and reports, request letters for conferences, accident reports, press releases, etc. In conjunction with the summer quarter courses (EDU 112 and EDU 110), each student will prepare a report on teacher-made materials as a project for both the English and education courses. Prerequisites: ENG 102, EDU 101, EDU 102, and EDU 103.

ENG 1101 Communications I

3 0 0 3

This is a course in communicative skills stressing reading, writing, speaking, and listening. The course includes library research, planning and delivering effective oral presentations, participation in group discussions, and practice in developing listening skills. Prerequisite: None.

ENG 1112 Communications II

3 0 0 3

This is a course in communicative skills with emphasis on written communication in business and industry. Included are units on business letters, job employment, records, forms, and reports. Prerequisite: None.

HEA 101 Personal Hygiene and Health

3 0 0 3

This course is a study of influences on physical and mental health, individual practices which aid in maintaining good physical and mental health throughout the life span, and responsibilities of those working with young children to maintain personal health and to serve as models for health practices. Prerequisite: None.

HEA 149 General Pharmacology

3 0 0 3

This course will provide the student with a working knowledge of pharmacological effects, side effects, contraindications, and use of drugs. Sterile preparation and the use of pharmacological measuring systems in preparing drugs will also be covered. Prerequisite: None.

HET 1101 Heating Systems

6 0 15 11

This course includes oil burner fundamentals; operation, control, and service of oil burner systems; gas heating devices; operation, control, and service of gas burner systems; installation and service of electric heating elements and their controls; principles of operation of hot water and low pressure systems; and the installation and service of piping, controls, pumps, and coils. Prerequisite: AHR 1105.

ISC 101 Introduction to Occupational Safety and Health

4 0 0 4

This is an introduction to the principles of occupational safety and health and the hazards faced by persons employed in industrial plants. This survey course covers record-keeping requirements, first aid, key man development, and preparation of potential management and supervisory personnel for certificates in these areas. Prerequisite: None.

ISC 201 Industrial Organization and Management

3 0 0 3

This course is a survey of the history of modern management and the various functions which the manager of a modern industrial enterprise must perform. It includes a study of the various departments that assist the manager in carrying out his responsibilities. Prerequisite: None.

ISC 202 Quality Control

3 2 0 4

This course is a study of the principles and techniques of quality control and cost saving; organization and procedure for efficient quality control; functions, responsibilities, structures, costs, reports, records, personnel, and vendor-customer relationships in quality control; and sampling inspections, process control, and tests for significance. Prerequisite: None.

ISC 203 Motion and Time Study

3 2 0 4

This course includes a study of operations analysis, types of process charts, breakeven analysis, micromotion analysis, work measurement techniques, predetermined time systems (MTM), and development of standard data for incentive systems. Prerequisite: None.

ISC 209 Plant Layout

3 2 0 4

This course is a practical study of factory planning with emphasis on the most efficient

arrangements of work areas to achieve lower manufacturing costs. Included are layouts for small and medium-sized plants; layout fundamentals; selection of production equipment and materials handling equipment; and the effective management of people, money, and materials in a manufacturing operation. Prerequisite: None.

MAT 001 Structure of Arithmetic

5 0 0 0

This course is designed to help the student gain and improve computational skills. Instruction is in the basic operations of arithmetic to include addition, subtraction, multiplication, division, fractions, decimals, and percentages. Prerequisite: None.

MAT 002 Pre-Business Mathematics

5 0 0 0

This course is a review and reinforcement of the basic mathematical skills used in business mathematics. Prerequisite: None.

MAT 003 Algebra

5 0 0 0

This course is designed to provide the student with the basic understanding and manipulative skills of elementary algebra. Prerequisite: None.

MAT 004 Pre-Technical Mathematics

5000

This course is designed for those students who have had some previous instruction in algebra. Basic concepts of algebra and trigonometry are covered. It includes the properties of the real number system, equations, functions, variables, and exponents. Prerequisite: None.

MAT 005 Geometry

0 0 0

This course is designed to provide the student with the basic understanding and manipulative skills of elementary geometry. Prerequisite: None.

MAT 020 Mathematics for Health Education

3 0 0 0

This course is designed for the student who is preparing for a health career. Topics covered are basic operations of arithmetic, fractions, decimals, percents, ratio and proportion, metric system, apothecaries' system, and mathematics of drugs and solutions. Prerequisite: None.

MAT 101 Technical Mathematics I

5 0 0 5

This is a course in mathematics designed to support all technology courses. Topics covered are fundamental concepts and operations of algebra, functions and graphs, trigonometric functions, linear equations and determinants, factoring and fractions, quadratic equations, vectors, oblique triangles, and graphs of trigonometric functions. Prerequisite: Satisfactory score on mathematics placement test or MAT 004.

MAT 102 Technical Mathematics II

5 0 0 5

This is a course in mathematics designed to support all technology courses. Topics covered are exponents and radicals, the j-operator, logarithms, algebraic and trigonometric equations, inequalities, variations, progressions, advanced topics in trigonometry, and equations of higher degree. Prerequisite: MAT 101.

MAT 103 Technical Mathematics III

5 0 0 5

This is a course in mathematics designed to support all technology courses. Topics covered are the straight line, limits, geometric and algebraic interpretation of the derivative, applications of the derivative, integration, and applications of integration. Prerequisite: MAT 102.

MAT 111 EDP Mathematics I

5 0 0 5

This course is a study of basic mathematical concepts which includes numbering systems and basic modern mathematics. All topics are stressed within the framework of application to data processing. Prerequisite: None.

MAT 112 EDP Mathematics II

5 0 0 5

This course is a continuation of MAT 111 EDP Mathematics I. It includes equations, linear and nonlinear functions, simultaneous equations, and matrices. It stresses the practical application to data processing problems. Prerequisite: MAT 111.

MAT 113 Allied Health Mathematics I

3 0 0 3

This is the first of a series of two courses designed to develop a high level of proficiency in basic mathematical and algebraic skills for the student in a health center. Topics covered are whole numbers, fractions, decimals, percents, algebraic concepts, linear equations, functions and graphs, and trigonometric functions. Prerequisite: None.

MAT 114 Allied Health Mathematics II

3 0 0 3

This is a continuation of MAT 113 Allied Health Mathematics I. Topics covered are logarithms, ratio and proportion, metric system, apothecaries' system, mathematics of drugs and solutions, and basic statistics. Prerequisite: MAT 113.

MAT 115 Fundamental Concepts of Mathematics

3 0 0 3

This is a general review of fundamental mathematics with emphasis on algebra and algebraic applications. Topics covered are the real number system, properties of numbers, sets, functions and relations, graphing, solution of equations and inequalities, polynomials, powers and roots, and basic trigonometry. Prerequisite: None.

MAT 116 Fundamental Concepts of Statistics

5 0 0 5

This is a course in statistics designed to support all technology courses. In scope, the course consists of frequency distribution, graphic representation, percentiles, measures of central tendency, variability, the normal distribution curve, sampling error, significance of difference between means, correlation, statistics and the design of experiment, and chi-square. Prerequisite: None.

MAT 118 General Math

3 0 0 3

This course is an introduction to elementary school mathematics. Topics covered are the basic operations of arithmetic with fractions, solving simple equations, and an introduction to certain concepts of modern math. Prerequisite: None.

MAT 201 Technical Mathematics IV

5 0 0 5

This is a course in mathematics designed to support the electronics technology curriculum. Topics covered are advanced concepts of a differential and integral calculus, the Maclaurin series, series expansions, and differential equations and applications. Prerequisite: MAT 103.

MAT 1101 Fundamentals of Mathematics

5 0 0 5

This course will give the student practical number theory and analysis of the following basic operations: addition, subtraction, multiplication, division, fractions, decimals, powers and roots, percentages, ratio and proportion, plane and solid geometric figures used in industry, and measurement of surfaces and volumes. Prerequisite: None.

MAT 1102 Algebra

5 0 0 5

This course covers the following basic concepts and operations of algebra: historical

background of our base-10 number system, algebraic operations (addition, subtraction, multiplication, and division), fractions, letter representation, grouping factoring, ratio and proportion, variations, graphical and algebraic solution of first-degree equations, solution of simultaneous equations by addition and subtraction, graphing, exponents, logarithms, tables, and interpolation. Prerequisite: None.

MAT 1103 Geometry

3003

This course covers fundamental properties and definitions, plane and solid geometric figures, selected general theorems, and geometric construction of lines, angles, and plane figures. Also included are areas of plane figures, volume of solids, and geometric principles applied to shop operations. Prerequisite: None.

MAT 1104 Trigonometry

0 0 3

This course covers trigonometric ratios, solving problems with right triangles, using tables and interpolating, solution of oblique triangles using law of sines and law of cosines, graphs of the trigonometric functions, inverse functions, trigonometric equations, and all topics are applied to practical problems. Prerequisite: MAT 1102.

MAT 1113 Carpenter's Mathematics and Estimating

0 0 5

This course includes practical problems which the carpenter must frequently solve. Emphasis is placed upon any weaknesses in the basic mathematics operations with instruction and practice of the needed operation. The course will also include problems involving common fractions, decimals, power and roots, percentages, and ratio and proportion. Prerequisite: None.

MAT 1114 Carpenter's Mathematics and Estimating

0 0 3

This course is a continuation of MAT 1113 Carpenter's Mathematics and Estimating, including problems dealing with plane and solid geometric figures and the measurement of surfaces and volumes. It also includes an introduction to algebra used in the trade and basic estimating practices for building materials. Prerequisite: MAT 1113 or equivalent.

MAT 1115 Elements of Mathematics

5 0 0 5

This is a course designed for the radio-TV program to include a review of arithmetic, powers of ten, elementary algebra, trigonometry, vectors, and logarithms. Prerequisite: None.

MAT 1117 Plumber's Arithmetic

4 0 0 4

This course is composed primarily of practical problems which the plumber must frequently solve. It also includes emphasis on instruction and practice in areas of deficiency in basic mathematics and use of problems involving common fractions, decimals, and percentages. Prerequisite: None.

MAT 1150 Printer's Mathematics

5 0 0 !

This course deals with the printer's point system as it applies to type spaces, furniture, and other spacing materials, as well as problems in spacing outlines and centering heads. Instruction and practice will be given in reading a micrometer. Problems in cutting paper economically, in figuring the amount, and in measuring the thickness of papers and offset plates will be used. Prerequisite: None.

MEC 101 Machine Processes I

1 0 6 3

This is an introductory course designed to acquaint the student with basic hand tools,

safety procedures, and machine processes in our modern industry. The course includes a study of measuring instruments, characteristics of metals, and cutting tools. The student will become familiar with the lathe family of the machine tools by performing selected operations such as turning, facing, threading, drilling, boring, and reaming. Prerequisite: None.

MEC 102 Machine Processes II

1 0 6 3

This course covers advanced operations on lathe, drilling, boring, and reaming machines. The types of milling machines, cutter, jig, fixture devices, the accessories used in a modern industrial plant, and safety in the shop are also studied. Prerequisite: MEC 101.

MEC 104 Applied Mechanics

5 0 0 5

This course covers the concepts and principles of statics, parallel, concurrent and noncurrent force systems in coplanar and noncoplanar situations, concepts of centroids and center of gravity, and moments of inertia. Prerequisites: MAT 103 and PHY 111.

MEC 165 Introduction to Basic Programming for Manufacturing Engineering Technology

1 0 3 2

This is a fundamental course which develops the concepts of basic programming language. Corequisites: MEC 101 and MAT 101.

MEC 180 Programming for Manufacturing

3 0 3 4

This is a course in the planning, organizing, and execution of programs to improve manufacturing processes through the use of the microcomputer. Prerequisites: MEC 165 and MEC 201.

MEC 201 Manufacturing Processes I

1 0 6 3

The newer concepts of work handling, automatic machining processes, chipless production, new techniques in metal forming, analysis of high-energy forming, ultrasonic machining, electrolytic metal removal, chemical milling, numerical control systems, and production methods in manufacturing are covered. Prerequisite: MEC 102.

MEC 202 Manufacturing Processes II

2 0 6 4

The newer concepts of work handling and automatic machining processes are emphasized. Concentrated study of production methods in manufacturing is included. Prerequisite: MEC 201.

MEC 203 Welding Processes

2 0 3 3

This is a basic study of all popular welding processes, including basic gas welding, basic arc, MIG, TIG, automatic flame cutting, and process applications. Operation of each process is limited to the extent required. Prerequisite: None.

MEC 205 Strength of Materials

3 2 0 4

This course includes a study of principles and analysis of stresses which occur within machine and structure elements subjected to various types of loads such as static, impact, varying, and dynamic. An analysis of these stresses is made as applied to riveted and welded joints, beams, columns, and other components. Prerequisite: MEC 104.

MEC 206 Process Analysis and Estimating

3 4 0 5

This course focuses on the planning of operation sequences for efficient production, tool planning, and estimating. The operation of machine tools in production projects is required in laboratory exercises. Prerequisite: None.

MEC 210 Ferrous Metallurgy

3 0 3 4

This course is a beginning course in the field of metallurgy. The first quarter is concerned with the extraction, characteristics, and uses of ferrous metals. The student is given an opportunity to use basic metallurgical equipment during the laboratory part of the course. Prerequisite: PHY 112.

MEC 213 Production Planning

4 0 0 4

This course emphasizes day-to-day plant direction, forecasting, product planning, scheduling, dispatching, routing, and inventory control. Students will identify problems and develop corrective action through the study of case histories. Prerequisite: ISC 201.

MEC 235 Fluid Power

3 0 3 4

This course includes the basic theories of hydraulic and pneumatic systems; combinations of systems in various circuits; and the basic designs and functions of circuits and motors, controls, electrohydraulic servomechanisms, plumbing, filtration, accumulators, and reservoirs. Prerequisites: PHY 111 and MAT 103.

MEC 237 Control Systems

3 2 0 4

This course covers the basic principles of electrical, electronic, and pneumatic control systems as related to industrial applications. The basic design and functions of circuits, motors, transducers, and servomechanisms, and a review of the National Electrical Code are included. Prerequisite: PHY 113.

MEC 240 Introduction to Robotics

3 2 0 4

This is a fundamental course in application, programming, and maintenance of robot devices. Prerequisites: MEC 235, MEC 237, and MEC 180.

MEC 1101 Machine Shop Theory and Practice I

3 0 12 7

This course provides an introduction to the machinist trade and the potential it holds for craftsmen. It deals primarily with the identification, care, and use of basic hand tools and precision measuring instruments. Elementary layout procedures and processes on the lathe drill press, grinding (off-hand) machines, and milling machines are introduced both in theory and practice. Prerequisite: None.

MEC 1102 Machine Shop Theory and Practice II

3 0 12 7

Instruction is provided on advanced operations using layout tools and procedures, power sawing, drill press, surface grinder, milling machine, and shaper. Students will be introduced to the basic operations of the cylindrical grinder and select projects encompassing all the operations, tools, and procedures thus far used and those to be stressed through the course. Prerequisite: MEC 1101.

MEC 1103 Machine Shop Theory and Practice III

3 0 12 7

This course provides advanced work on the engine lathe; turning, boring, and threading machines; grinders; milling machine; and shaper. An introduction to basic indexing and terminology with additional processes on calculating, cutting, and measuring of spur, helical, worm gears, and wheels is provided. The use of precision tools and measuring

instruments such as vernier height gages, protractors, and comparators is provided. Basic exercises are done on the turret lathe and on the tool and cutter grinder. Prerequisite: MEC 1102.

MEC 1104 Machine Shop Theory and Practice IV

4 0 15 9

Class projects using previously learned procedures in planning, blueprint reading, machine operations, final assembly, and inspection are developed. The instruction provides for additional processes on the turret lathe, tool and cutting grinder, cylindrical and surface grinder, and advanced milling machine operations. Special procedures and operations, processes and equipment, faithful observance of safety procedures, and establishment of good work habits and attitudes acceptable to the industry are stressed. Prerequisite: MEC 1103.

MEC 1112 Machine Shop Processes

1 0 3 2

This course acquaints the student with the procedures of layout work and the correct use of hand and machine tools. Experiences in the fundamentals of drill press and lathe operations, hand grinding of drill bits and lathe tools, and set-up work applied to the trade are provided. Prerequisite: None.

MEC 1115 Treatment of Ferrous Metals

2 0 3 3

This course provides an investigation into the properties of ferrous metals and tests to determine their uses. It includes some chemical metallurgy to provide a background for the understanding of the physical changes and causes of these changes in metals. Topics studied are physical metallurgy of ferrous metals, producing iron and steel, theory of alloys, shaping and forming, heat treatment for steel, surface treatments, alloy of special steel, and classification of steels and cast iron. Prerequisite: None.

MEC 1116 Treatment of Nonferrous Metals

2 0 3 3

This course is a continuation of the study of physical metallurgy. A study of the nonferrous metals, bearing metals (brass, bronze, lead), light metals (aluminum and magnesium), copper and its alloys, powder metallurgy, titanium, zirconium, iridium, and vanadium are included in the course. Prerequisite: None.

MEC 1117 Metallurgy for Welders

2 0 3 3

This course is specifically designed to introduce the welding student to the science of metallurgy with the aim of providing an understanding of the effects of welding heat upon the metals being joined. An understanding of the proper heat treatments of both ferrous parts and nonferrous parts gives students insight into how heat affects the welding process. During this course, the welder is introduced to hardness testing, mechanical testing, mechanical and nondestructive testing of welds, and metallographic techniques including microscopic examination of the structures of metals. Prerequisite: None.

MEC 1120 Machine Processes

1 0 6 3

This course is the study of practices used in metalworking shops and an introduction to how materials can be utilized. Demonstration of the metalworking lathes, drills, milling machines, shapers, and a study of the capabilities of these machines are also included. Prerequisite: None.

NMT 105 Nuclear Medicine Technology I

2 0 0 2

This course will provide the student with an overview of the field of nuclear medicine. The course will examine the types of procedures performed in nuclear medicine, a brief

history of the field, general patient care, and practical radiation safety. Prerequisite: None.

NMT 106 Nuclear Medicine Technology II

2 0 0 2

This course will introduce the students to their responsibilities as health care personnel. The emphasis of the course will be on various aspects of the student–patient relationship. The course will also deal with other interpersonal relationships that the students will face as members of the health care team. Prerequisite: None.

NMT 107 Nuclear Medicine Technology III

2 2 0 3

This course will introduce the student to the instrumentation of nuclear medicine and the area of the radiopharmacy. The emphasis of the course will be on the practical aspects rather than the theoretical aspects. Prerequisite: NMT 105.

NMT 108 Nuclear Medicine Technology IV

3 0 0 3

This course deals with In Vivo nuclear medicine procedures. A cookbook type format will be used to present all routine In Vivo procedures. In the lab portion of the course, the students will walk through the procedures using other students as simulated patients. Prerequisite: NMT 105.

NMT 111 Principles of Nuclear Medicine I

0 0 2

This course will deal with In Vivo nuclear medicine procedures. During the course, the students will examine studies pertaining to the central nervous system, pulmonary system, and gastrointestinal tract. Prerequisite: NMT 108.

NMT 115 Orientation to Clinical Nuclear Medicine

0 2 3 2

This course will provide the student with an orientation to the clinical aspects of the allied health specialty of nuclear medicine techology. During this course, the student will receive lab and clinical instruction to acquaint him with the language of the allied health specialty and familiarize him with the physical layout of the clinical areas, the equipment used, and the procedures performed in the clinical facilities. Prerequisite: None.

NMT 116 Nuclear Physics

2 0 0 2

This course covers nuclear decay schemes and more complicated concepts of radioactive decay. Also discussed are interactions of radiation with matter and the calculations and measurement of radiation doses. Prerequisite: PHY 102.

NMT 117 Health Physics

1 0 0 1

During this course, students will study protective regulations, monitoring methods, techniques for reducing exposure of patients and technologists, and the Nuclear Regulatory Commission and N.C. Radiation Protection Program requirements. Prerequisite: None.

NMT 119 Introduction to Clinical Practice I

0 2 6 3

This is the first of a two-course series designed to introduce the student to the clinical practice of nuclear medicine technology. During the course, the student will be assigned to four clinical rotations. The student will assist the supervising technologist with the routine duties of each rotation. Prerequisites: SAF 3005 and NMT 115.

NMT 124 Introduction to Clinical Practice II

0 0 12 4

This is the second course in a two-course series designed to introduce the student to

the clinical practice of nuclear medicine technology. During this course, the student will be assigned to six clinical rotations. The student will assist the supervising staff technologist with the routine duties of each rotation. Upon completion of this course, the student will have been exposed to all phases of the clinical practice. Prerequisites: SAF 3005 and NMT 115.

NMT 201 Clinical Practice

0 0 21 7

This is one of four courses designed to give the student an advanced understanding of clinical practice. The student will have three rotations selected to provide an opportunity to experience various aspects of nuclear medicine technology. Prerequisites: NMT 115, NMT 119, NMT 124, BIO 108, and SAF 3005.

NMT 202 Clinical Practice

0 0 21 7

This is one of four courses designed to give the student an advanced understanding of clinical practice. The student will have three rotations selected to provide an opportunity to experience various aspects of nuclear medicine technology. Prerequisites: NMT 115, NMT 119, NMT 124, BIO 108, and SAF 3005.

NMT 203 Clinical Practice

0 0 21 7

This is one of four courses designed to give the student an advanced understanding of clinical practice. The student will have three rotations selected to provide an opportunity to experience various aspects of nuclear medicine technology. Prerequisites: NMT 115, NMT 119, NMT 124, BIO 108, and SAF 3005.

NMT 204 Clinical Practice

0 0 21 7

This is one of four courses designed to give the student an advanced understanding of clinical practice. The student will have three rotations selected to provide an opportunity to experience various aspects of nuclear medicine technology. Prerequisites: NMT 115, NMT 119, NMT 124, BIO 108, and SAF 3005.

NMT 213 Principles of Nuclear Pharmacy

3 0 0 3

Students will receive classroom instruction related to the operation of a nuclear pharmacy. Topics covered will include mathematics, radionuclide generators, radiopharmaceuticals, quality control of radiopharmaceuticals, and common nuclear pharmacy procedures. Prerequisite: None.

NMT 220 Instrumentation I

2 0 0 2

This course will provide the students with basic information about nuclear medicine instrumentation. The course will focus on the operation of components that are common to the majority of the instruments used in nuclear medicine. In addition to the common components, the course will also examine the operation and utilization of common auxiliary devices. Prerequisites: MAT 116 and PHY 102.

NMT 221 Principles of Nuclear Medicine II

2 0 0 2

This course will deal with In Vivo nuclear medicine procedures. During the course, the students will examine studies pertaining to the skeletal system, the cardiovascular system, and the thyroid gland. Prerequisite: NMT 108.

NMT 225 Computers in Nuclear Medicine

3 0 0 3

This course will provide the student with a general introduction to the operation of computers and the application of computers to the field of nuclear medicine. Prerequisite: NMT 107.

NMT 231 Principles of Nuclear Medicine III

2 0 0 2

This course deals with In Vivo nuclear medicine procedures. During the course, the students will examine the studies pertaining to the urinary system, In Vivo lab procedures, and therapy procedures. Prerequisite: NMT 108.

NMT 235 Instrumentation II

2 2 0 3

This course will develop the students' understanding of the use of nuclear counting statistics and the operation of nuclear medicine instruments. The primary focus of the course will be on theory of operation of gas detectors and sodium iodide scintillation detectors. In addition, the students will examine the operational characteristics, quality control procedures, and practical utilization of selected instruments. Prerequisite: NMT 220.

NMT 245 Instrumentation III

2 2 0 3

This is the last of three courses designed to develop the students' understanding of nuclear medicine instruments. The content of the course will include collimators, rectilinear scanners, gamma cameras, and computers. The primary focus of the course will be on theory of operation, operational characteristics, quality control procedures, and the practical utilization of the instruments covered. Prerequisite: NMT 220.

NMT 251 Principles of In Vitro Nuclear Medicine I

2 2 0 3

This is the first of two courses designed to develop the students' skills and knowledge in the area of In Vitro nuclear medicine. The focus of the course will be on laboratory skills, selected aspects of general chemistry, and selected aspects of biochemistry. Prerequisite: CHM 103.

NMT 258 Principles of In Vitro Nuclear Medicine II

2 2 0 3

This is the second course in a two-course series designed to develop the students' skills and knowledge in the area of In Vitro nuclear medicine. The primary focus of the course will be on the principles of competitive protein binding assays and the procedure for common assays. Prerequisite: NMT 251.

NMT 289 Radiobiology

2 0 0 2

This is a course in which the fundamentals of radiobiology, a system's sensitivity to radiation (normal and neoplastic), radiation pathology, and the biological effects of radiation are stressed. Emphasis is placed on the effects of radiation and the effects of radiation absorption on tissue and tissue recovery rate. Prerequisite: NMT 116.

NMT 290 Nuclear Medicine Technology Seminar

2 0 0 2

This course gives the student an opportunity to review any aspects of nuclear technology in which he has special interest. Guest speakers will be invited to present papers on special topics. Prerequisites: NMT 201, NMT 202, NMT 203, and NMT 204.

NMT 292 Nuclear Medicine Technology Review

2 0 0 2

This course will be a comprehensive review of the nuclear medicine program. The primary focus will be on routine procedures and information that is vital to a nuclear medicine technologist. The culmination of the course will be a comprehensive exam. Prerequisites: NMT 111, NMT 116, NMT 117, NMT 213, NMT 221, NMT 231, NMT 235, NMT 245, NMT 251, and NMT 289.

NMT 300 Clinical Practice Review

0 0 15 5

During this course, the student will be assigned to six clinical rotations. The rotations

will be chosen to strengthen demonstrated weaknesses of the student's previous clinical performance. Prerequisites: NMT 201, NMT 202, NMT 203, NMT 204, and SAF 3005.

NUR 119 Pharmacology

2 2 0 3

This course is designed to prepare the students for safe administration of medications. Emphasis is placed on the mathematics of drugs and solutions, methods of administration, and the general classification of pharmacological agents. Knowledge gained in pharmacology will be incorporated into the nursing process as it applies to nursing care. Instructions in this area will be implemented through the use of self-study, group activities, audiovisual aids, demonstrations, laboratory practice, and lecture. Evaluations will measure the students' ability to meet course objectives through the use of testing, special assignments, and laboratory experiences. Planned laboratory experiences are designed to teach the students correct medication administration techniques. Prerequisite: None. Corequisite: NUR 120.

NUR 120 Medical - Surgical Nursing I

4 2 6 7

This course provides the students an orientation to the body systems approach to nursing care, the nursing process, and an orientation to the field of health. Included are an exploration of the events which have influenced the practice of nursing, the role of the nurse, legal aspects, and the way in which the community provides health services. There is an introduction to the dermatological system and the care of the dying patient. Planned clinical experience is designed to teach the student basic nursing skills and provide introductory experience. Emphasis is placed on providing basic physical care and beginning to meet the psychosocial needs of the patient. Instruction in these areas will be implemented through the use of self-study, group activities, audiovisual aids, demonstrations, laboratory practice, community resources, lectures, and planned clinical experience. Evaluations will measure the students' ability to meet course objectives through the use of testing and special assignments and clinical experience. Satisfactory completion of the clinical component of the course is required in order to pass the course. Prerequisite: None. Corequisite: NUR 119.

NUR 122 Medical - Surgical Nursing II

4 2 6 7

This course emphasizes the use of the nursing process in the study of the gastrointestinal and renal systems. It stresses assessment, intervention, and evaluation for patients with common problems of the gastrointestinal or renal systems. Included are an introduction to fluids and electrolytes and oncologic nursing. Planned clinical experience will concentrate on giving basic physical care, administering medications, using basic communication techniques, understanding defense mechanisms and implementing health teaching. Evaluation will include the response of the patient to the nursing care and a self-evaluation. Instruction in these areas will be implemented through the use of self-study, group activities, audiovisual aids, demonstrations, laboratory practice, community resources, lectures, and planned clinical experiences. Evaluations will measure the students' ability to meet course objectives through the use of testing, special assignments, nursing care plans, and clinical experience. Satisfactory completion of the clinical components of the course is required in order to pass the course. Prerequisites: BIO 107, NUR 119, and NUR 120.

NUR 124 Medical - Surgical Nursing III

4 0 12 8

This course allows the student to continue the body system approach in utilizing the nursing process in giving nursing care. Special emphasis is placed on musculoskeletal

special senses, blood disorders, and care of the surgical patient in clinical practice as well as in theory. Instruction in these areas will be implemented through the use of self-study, group activities, audiovisual aids, demonstrations and laboratory practice, community resources, lectures, and planned clinical experience. Evaluations measure the students' ability to meet course objectives through the use of testing, special assignments, nursing care plans and clinical experience. Satisfactory completion of the clinical components of the course is required in order to pass the course. Prerequisites: NUR 119, NUR 120, NUR 122, BIO 107, BIO 108, and NUT 101.

NUR 126 Medical - Surgical Nursing IV

4 0 12 8

This course allows the student to continue the body system approach in utilizing the nursing process with special emphasis placed on respiratory, endocrine, and cardiovascular disorders in clinical practice as well as in theory. Instruction in these areas will be implemented through the use of self-study, group activities, audiovisual aids, demonstrations and laboratory practice, community resources, lectures, and planned clinical practice. Evaluations will measure the students' ability to meet course objectives through the use of testing, special assignments, nursing care plans and clinical experiences. Satisfactory completion of the clinical components of the course is required in order to pass the course. Prerequisites: BIO 107, BIO 108, BIO 111, NUR 119, NUR 120, NUR 124, and NUT 101.

NUR 216 Maternity Nursing

4 0 12 8

The complete maternity cycle will be presented with emphasis on family-centered care. Content will be offered in the physiological and psychosocial development throughout the childbearing experience. Aspects of gynecology relative to child birth will be introduced. This course will provide concepts regarding the roles of families and nurses in today's changing society. This course is also designed to give the students an opportunity to apply knowledge and skills gained in the care of the childbearing family. An opportunity will be given for the student to utilize the nursing process in planning care for families during the childbearing process. Health teaching will be emphasized. Instruction in this area will be implemented through the use of self-study, group activities, nursing care plans, audiovisual aids, community resources, lectures, and planned patient assignments in the prenatal clinic, labor and delivery room, postpartum unit, and the newborn nursery. Evaluations will measure the students' ability to meet the course objectives through the use of testing, special assignments, and planned clinical experience. Satisfactory completion of the clinical components of the course is required in order to pass the course. Prerequisites: BIO 107, BIO 108, BIO 111, NUR 119, NUR 120, NUR 122, NUR 124, NUR 126, NUT 101, and PSY 110.

NUR 218 Pediatric Nursing

4 0 12 8

This course is designed to provide the student with the opportunity to study disease conditions of the body systems seen commonly in children. It will also allow the student to apply this knowledge and previously learned scientific principles to the nursing care of children in a clinical setting. The nursing process will be the tool used to determine and meet the needs of the pediatric patient with specific problems or disease entities. Included are an exploration of the history of pediatric nursing, trends in health care in children, and a study of current child care laws. Emphasis will be placed upon the nurse's role in meeting the needs of a child according to his/her stage of growth and development as well as responding supportively to the family during their child's illness. The preventative aspects as well as the available community resources will be dis-

cussed both in the classroom and the clinical areas. Instruction in these areas will be implemented through the use of self-study, group activities, nursing care plans, audiovisual aids, community resources, lectures, and planned patient assignments in the hospitals and clinics. Evaluations measure the students' ability to meet the course objectives through the use of testing, nursing care plans, special assignments, and planned clinical experience. Satisfactory completion of the clinical component of the course is required in order to pass the course. Prerequisites: BIO 107, BIO 108, BIO 111, NUR 119, NUR 120, NUR 122, NUR 124, NUR 126, NUT 101, and PSY 110.

NUR 220 Medical - Surgical Nursing V

4 0 18 5

This course provides the student an opportunity to integrate previously acquired knowlege of body systems and the nursing process with specific emphasis on the neurological and multi-system disorders. Planned clinical experience is designed with emphasis on application of this integration as exhibited by individual patient needs. Instructions in this area will be implemented through the use self-study, group activities, audiovisual aids, demonstrations and laboratory practice, community resources and lectures. Evaluations will measure the students' ability to meet course objectives through the use of testing, nursing care plans, AV aids, special assignments and planned clinical experience. Satisfactory completion of the clinical component of the course is required in order to pass the course. Prerequisites: BIO 107, BIO 108, BIO 111, NUR 119, NUR 120, NUR 122, NUR 124, NUR 126, and NUT 101.

NUR 222 Medical – Surgical Nursing VI

4 0 18 5

This final course in medical — surgical nursing provides the students an opportunity to assimilate the previously acquired knowledge of body systems and the nursing process and to apply it to individualized nursing care. The area of focus deals with multi-system disorders. Planned clinical experience will also be designed to help the student adjust to the realities of employment as a graduate using bicultural orientation theories. Instruction will be implemented through the use of self-study, group activities, audiovisual aids, demonstrations and laboratory practices, community resources and lectures. Evaluations measure the students' ability to meet course objectives through the use of testing, special assignments, and clinical experience. Satisfactory completion of the clinical components of the course is required in order to pass the course. Prerequisites: BIO 107, BIO 108, BIO 111, NUR 119, NUR 120, NUR 122, NUR 124, NUR 126, NUR 220, and NUT 101.

NUR 224 Psychiatric Nursing

4 0 12 4

This course is designed to provide a foundation of knowledge from which the student will identify elements of healthy behavior as well as maladaptive behaviors of the psychosocial system that are indicative of psychiatric disorders. Emphasis is placed on continued development of the students' therapeutic nurse interpersonal relationship as it is related to assisting the psychologically distressed person. The history, current treatment modalities, the role of the nurse, legal aspects, and psycho-dynamics of behavior disorders will be stressed. The student will be introduced to various techniques and skills utilized in assisting the person with psychiatric disorders to improve his sense of well-being and restore his psychological equilibrium. Instruction in these areas will be implemented through the use of self-study, group activities, audiovisual aids, demonstrations in clinical practice, community resources, lectures, and process recordings. Evaluations of the students' ability to meet course objectives will be measured through the use of testing, special assignments, and clinical experience. Satis-

factory completion of the clinical component of the course is required in order to pass the course. Prerequisites: BIO 107, BIO 108, BIO 111, NUR 119, NUR 120, NUR 122, NUR 124, NUR 126, NUT 101, PSY 101, PSY 110, PSY 111, and SOC 103.

NUT 001 Basic Nutrition

3 0 0 0

This course is the study of basic nutrition with emphasis on functions and sources of nutrients needed for a balanced daily diet, including an overview of basic food elements, digestion, absorption, and metabolism. Prerequisite: None.

NUT 101 General Nutrition

0 0

Basic principles of human nutrition with emphasis on the nutrients and factors which affect their utilization in the human body are studied. Prerequisite: None.

NUT 102 Nutrition for Young Children

2 0 4

This course is the study of basic nutrition with emphasis on methods of helping young children and their families learn nutritional concepts and on planning balanced diets for preschool children. Prerequisite: None. Corequisite: EDU 103.

PHI 101 Introduction to Philosophy

3 0 0 3

This is an introductory survey of the field designed to make the student familiar with the mainstreams of philosophical thought from ancient to modern times. Students will be given an opportunity to examine major concepts and apply them to their own value systems. Prerequisite: None.

PHY 001 Pre-Technical Physics

3 2 0 0

This is a review of some of the basic concepts of physics. The topics included are systems of measurement, force and motion, and the properties of materials. Emphasis is placed on laboratory procedures and graphical analysis. Prerequisite: None.

PHY 100 Introduction to Physics

3 0 0 3

This course is an introduction to the problems and concepts of physics. The major areas covered are fundamental units and systems of measurements, motion, forces, momentum, work, energy, and power. Quantitative problems involve the use of elementary algebra and trigonometry. Prerequisite: None.

PHY 101 Concepts in Physics

3 0 0 3

This course is a nonmathematical introduction to problems and concepts of physics. The major areas covered are mathematics, properties of mathematics, heat, sound, light, electricity, and atomic theory. Emphasis will be on the association of physical principles with everyday phenomena. Prerequisite: None.

PHY 102 Electricity and Electronics

3 0 0 3

This is a study of electricity and electronics including the concepts of electric and magnetic fields, electric potential, electric circuits, and solidstate devices. Emphasis is on medical applications of electricity and electronics. Quantitative problems involve the use of elementary algebra and trigonometry. Prerequisites: MAT 113 and PHY 101.

PHY 105 General Physics I

4 0 0 4

This course is the first in a series of two courses which introduce the basic topics of physics. The topics covered include units of measurement, motion, force, momentum, forces of nature, energy, temperature, heat, electric fields, and currents. Quantitative problems include the use of elementary algebra. Prerequisite: MAT 113 or MAT 101.

PHY 106 General Physics II

4 0 0 4

This course is the second in a series of two courses which introduce the basic topics of physics. The topics covered include magnetism, electromagnetism, waves and radiation, principles of light applied to x-rays, elementary quantum concepts of atoms, and atomic radiation. Quantitative problems include the use of elementary algebra. Prerequisite: PHY 105.

PHY 111 Physics — Mechanics

3 2 0 4

This is a fundamental course which develops the concepts of force, motion, work, energy, and power. Also included are the topics of vector analysis, rotational motion, and basic machines. Prerequisite: None. Corequisite: MAT 102.

PHY 112 Physics — Materials and Heat

3 2 0 4

This is a course which examines the properties of solids, liquids at rest and in motion, gas laws and their application, heat and thermodynamics. Emphasis is on practical application through the use of realistic problems and laboratory exercises. Prerequisite: PHY 111.

PHY 113 Physics — Electricity

3 2 0 4

This is a study of the basic principles of electricity including electron theory, direct current circuits, alternating current circuits, electromagnetic interactions, and batteries. Emphasis is on practical application through the study of electrical power generation, transmission, and conversion devices. Prerequisite: PHY 111.

PHY 114 Physics — Light and Sound

3 2 0 4

This is a study of wave motion and the generation, transmission, and detection of sound and light. Topics include acoustics, illumination, optical devices, and lasers. Practical application is emphasized through exercises and acoustical analysis of buildings and lighting system design and layout. Prerequisite: PHY 111.

PHY 1101 Applied Science I

3 2 0 4

This is an introduction to some physical principles and their application in industry. Topics included are measurements in the English and metric system and properties of solids, liquids, and gases. Practical application is stressed by use of realistic problems and laboratory exercises. Prerequisite: None.

PHY 1102 Applied Science II

3 2 0 4

This course is a study of the concepts of force, motion, work, energy, power, and heat. Practical applications are realized through the study of friction and simple machines and the relationship between thermal and mechanical energy. Prerequisite: None.

PHY 1103 Fundamentals of Electricity

3 2 0 4

This course is a study of elementary principles of electricity including the structure of matter and electron theory, basic electrical units, and the relationship of current, voltage, resistance, and power in series, parallel, and combination circuits. Prerequisite: None.

PHY 1104 Applied Science IV

3 2 0 4

This course is a study of wave motion and sound and light. Practical applications are stressed through the study of acoustics, musical rounds, color mixing, optical devices, illumination, and the laser. Prerequisite: None.

PHY 1114 Science for Printers

3 2 0 4

This course is designed to acquaint the student with some of the facts and principles concerning the properties and structure of matter. Major topics considered will be the general and specific properties of matter, atomic theory, physical and chemical changes, theories of light, photometry, mirrors and lenses, reflection, refraction, and color. Prerequisite: MAT 1150.

PHY 1116 Solar Energy Conversion Systems

3 2 0 4

The primary emphasis of this course will be on the operation of passive and active solar systems and will include an introduction to the operation and evaluation of various energy conversion systems. The student will learn how to select the components for a complete solar space heating and/or domestic hot water heating system. Prerequisite: MAT 1102 or equivalent.

PLU 1131 Plumbing I

8 0 15 13

This course is an introduction to the plumbing trade. It includes plumbing systems, use and care of hand tools, and selection of plumbing materials. The student will learn to solder copper pipe, cement plastic pipe, and pour lead joints. Plumbing layouts and the study of the North Carolina Plumbing Code will also be introduced. Prerequisite: None.

PLU 1132 Plumbing II

3 0 15 8

This course is a continuation of PLU 1131 Plumbing I. The student will practice "roughing-in" houses, which includes measuring for and cutting holes in stud walls; figuring proper slope in pipe; and locating stacks, stack vents, toilets, and drains. The student will also learn to determine the size of water and waste pipes and how to install them. The study of plumbing layouts and the North Carolina Plumbing Code will be continued. Prerequisite: PLU 1131.

PLU 1133 Plumbing III

5 0 18 11

This course is a continuation of PLU 1132 Plumbing II. General plumbing practice will be continued. However, in this quarter the student will assist in the selection and installation of all types of fixtures as well as the selection, installation, and servicing of water heaters. The study of plumbing layouts and the North Carolina Plumbing Code will be continued. Prerequisite: PLU 1132.

PLU 1134 Plumbing IV

3 0 21 10

This course is a continuation of PLU 1133 Plumbing III. The installation of plumbing will be continued. Additionally, the topics of plumbing repairs, troubleshooting, and unclogging drains will be covered. The study of layouts and plumbing codes will be concluded. Prerequisite: PLU 1133.

PME 1101 Internal Combustion Engines

4 0 15 9

This course includes the development of a thorough knowledge and ability in using, maintaining, and storing the various hand tools and measuring devices needed in engine repair work and the study of the construction and operation of components of internal combustion engines. Testing of engine performance; servicing and maintenance of pistons, valves, cams, and camshafts; fuel and exhaust systems; cooling systems; proper lubrication; and methods of testing, diagnosing, and repairing are covered. Prerequisite: None.

PME 1102 Automotive Electrical Systems

4 0 15 9

This course includes a thorough study of the electrical system of the automobile. The

battery, cranking mechanisms, generators, ignition, accessories, wiring, special tools, and testing equipment for the electrical system are covered. Prerequisite: None.

PME 1103 Automotive Fuel Systems

1 0 3 2

This course covers the characteristics of fuels, types of fuel systems, fuel pumps, carburetors, fuel injectors, special tools, and testing equipment for the fuel system. Prerequisite: None.

PNE 1101 Fundamentals of Practical Nursing

7007

This course assists the student in assuming the role of student practical nurse in the hospital setting. In the classroom the student learns the hand skills and the knowledge necessary for beginning care and relationships with patients. It is taught concurrently with PNE 1201 Fundamentals Lab. Prerequisite: None.

PNE 1102 Nutrition and Diet Therapy

3 0 0 3

Nutritional requirements and planning for all age groups are included in this course. It presents religious, cultural, social, and psychological factors that change dietary needs and is the study of therapeutic diets that affect disease conditions. Prerequisite: None.

PNE 1103 Anatomy and Physiology

4 0 0 4

This course is the study of the general plan of the body and the nine systems. It is designed to help the student understand how the human body controls its functions, stands erect and moves, distributes food and oxygen, removes waste, and provides for species survival. Each unit contains a section of medical terminology. Prerequisite: None.

PNE 1105 Drug Administration I

3 0 0 3

This course is designed for instruction in safe techniques for drug administration. Systems for measuring drugs are included with practice in solving drug problems of measurement and conversion. Prerequisite: None.

PNE 1106 Medical-Surgical Nursing I

8 0 0 8

This course expands the knowledge of basic nursing care taught in PNE 1201 Fundamentals Lab by applying basic skills to specific needs of the following types of patients: geriatric, surgical, cancer, and the terminally ill. Varying rehabilitation needs will be included. Lessons in general causes of disease and the body's response will be followed by nursing care of medical and surgical conditions of the circulatory, endocrine, and reproductive systems. This course is taught concurrently with PNE 1208 Medical – Surgical Practicum I. Prerequisites: PNE 1101, PNE 1102, PNE 1103, PNE 1105, and PNE 1201.

PNE 1107 Maternity Nursing

4 0 0 4

This course presents the nursing care of the normal obstetrical patient and newborn child. Nursing care of congenital anomalies is included. Emphasis is placed on provision of better and safer nursing care for the expectant mother and her baby. This course is taught concurrently with PNE 1206 Maternity Practicum. Prerequisites: PNE 1101, PNE 1102, PNE 1103, PNE 1105, PNE 1201, and PNE 1208.

PNE 1108 Nursing of Children

4 0 0 4

The normal growth and development pattern of the child from infancy through adolescence is studied in this course. Methods of meeting the needs of the hospitalized child are included. The student is prepared to care for hospitalized children with common

disorders. Material on infectious disease is included. This course is taught concurrently with PNE 1204 Pediatric Practicum. Prerequisites: PNE 1101, PNE 1102, PNE 1103, PNE 1105, PNE 1106, PNE 1111, PNE 1201, and PNE 1208.

PNE 1110 Medical-Surgical Nursing II

8 0 0 8

This course includes the study of symptoms, medical and surgical treatments, and nursing care for common disorders which occur in adults as related to the following body systems: respiratory, gastrointestinal and accessory organs, nervous, musculo-skeletal, urinary, integumentary, and the eye, ear, and blood-forming organs. Less common conditions are identified or discussed. Basic first aid principles and rationale are included. This course is taught concurrently with PNE 1209 Medical – Surgical Practicum II. Prerequisites: PNE 1101, PNE 1102, PNE 1103, PNE 1105, PNE 1106, PNE 1107, PNE 1108, and PNE 1111.

PNE 1111 Drug Administration II

4 0 0 4

Factual material is given in this course on dosages and effects of drugs. There is experience with equipment and techniques used in preparing and giving injections. Insulin therapy and the storage, safety regulations, and preparation of narcotics are studied. This course is taught concurrently with PNE 1208 Medical – Surgical Practicum I. Prerequisites: PNE 1105 and PNE 1201.

PNE 1115 Personal and Vocational Relationships

3 0 0 3

In this course the student is assisted in assuming the role of a graduate practical nurse. The content includes advanced nursing ethics, laws that guide nursing practice, and a review of the role of the practical nurse as student and graduate. Career opportunities and responsibilities will be evaluated. Prerequisites: PNE 1101, PNE 1102, PNE 1103, PNE 1105, PNE 1106, PNE 1107, PNE 1108, PNE 11111, PNE 1201, PNE 1204, PNE 1206, and PNE 1208.

PNE 1201 Fundamentals Lab

0 6 0 3

This course is taught concurrently with PNE 1101 Fundamentals of Practical Nursing. The hand skills for nursing are performed in hospital units with patients. The content taught includes experiences in basic communication techniques, bedmaking, giving hygienic care, vital signs, safety procedures, charting, reporting, and assessing patients' needs. Prerequisite: None.

PNE 1204 Pediatric Practicum (1/2 quarter)

1 0 15 3

This course, taught concurrently with PNE 1108 Nursing for Children, provides experience with nursing care of children ranging in age from infancy to adolescence. Emphasis will be placed on applying theory to practice through adapting nursing care plans to patients' stages of growth and development and to the existing condition or disease. Students will learn to adapt nursing care and procedures, medication administration, and documentation of care to the needs of children and to the routing of the pediatric unit. Prerequisites: PNE 1201 and PNE 1208.

PNE 1206 Maternity Practicum (1/2 quarter)

1 0 15 3

This course is taught concurrently with PNE 1107 Maternity Nursing. It provides application of theory to practice through orientations and teacher-supervised experiences in the labor and delivery suite, the newborn nursery, and the postpartal unit. The student has opportunities to learn through participation in and observation of nursing care and procedures before, during, and after delivery. Prerequisites: PNE 1201 and PNE 1208.

PNE 1208 Medical-Surgical Practicum I

1 0 15 6

This course, taught concurrently with PNE 1106 Medical—Surgical Nursing I, provides experience with adult patients in a hospital. Patients with medical and surgical disorders are assigned for student care. Emphasis is on nursing procedures, solving care problems, and drug administration. Prerequisites: PNE 1101, PNE 1102, PNE 1103, PNE 1105, and PNE 1201.

PNE 1209 Medical-Surgical Practicum II

1 0 15 6

This course provides experience with adult patients in a hospital. Patients with medical and surgical conditions are assigned for patient care. Emphasis is placed on preparing the student for the role of graduate practical nurse by providing more complex assignments and through participation in and implementation of the health care plan developed by the registered nurse. This course is taught concurrently with PNE 1110 Medical—Surgical Nursing II. Prerequisites: PNE 1201, PNE 1204, PNE 1206, and PNE 1208.

POL 102 Government-National

5 0 0 5

Topics covered in this course include English and colonial background, the Articles of Confederation and the framing of the federal constitution, the nature of the federal union, states' rights, federal powers, political parties, and the general organization and functioning of the national government. Prerequisite: None.

POL 103 Government-State and Local

5 0 0 5

This course is a study of state and local government, including state—federal relationships, the functions and prerogatives of the branches, problems of administration, legal procedures, law enforcement, police power, taxation, revenues, and appropriations. Special attention will be given to North Carolina's government. Prerequisite: None.

PRN 1101 Printer's English

3 0 0 3

This is not a course for beginners in English but is intended to provide a review of the essentials of English as they relate to the art of printing. The course deals with compounding words, modern punctuation, capitalization, syllabication, contractions, homonyms, errors in English words, sentence structure, and the marks in proofreading. Prerequisite: None.

PRN 1131 Introduction to Printing

6 0 12 10

This course is an introduction to the printing trade. Instruction will include student orientation, a historical outline of graphic arts, familiarization of terms, equipment, and tools used in printing, and demonstrations of the equipment used in graphic arts. The student will be required to produce a printing project. Safe practices and safety rules are stressed. Prerequisite: None.

PRN 1132 Offset Printing I

4 0 12 8

This course is an introduction to offset printing. The operation of offset presses such as Multilith 1250 and 1250W, ATF Chief, and Davidson Dualith will be covered. The camera, stripping, and platemaking will also be covered. The student will be required to operate each of the pieces of equipment. Prerequisites: BUS 1122, MAT 1150, PRN 1101, and PRN 1131.

PRN 1133 Offset Printing II

6 0 15 11

A continuation of PRN 1132 Offset Printing I, this course will place emphasis on use and

maintenance of the larger press. Students will be introduced to the production of two-, three-, and four-color printing. This course is also an advanced study of the process camera and related darkroom equipment. Duotones will be emphasized. Prerequisites: PHY 1114, PRN 1132, and PRN 1134.

PRN 1134 Composition I

3 0 6 5

The students will be instructed in the methods of copy preparation and the use of equipment in that phase of graphic arts. After the students learn how to prepare the copy, they will be required to produce one or more jobs. Prerequisites: BUS 1122, MAT 1150, PRN 1101, and PRN 1131.

PRN 1135 Composition II

3 0 3 4

This course is a continuation of PRN 1134 Composition I. The major part of this course will be devoted to cold type composition by the machine method. Machines covered will include the typewriter, varityper, and headliner. Instruction will include photographs and color. Prerequisites: PHY 1114, PRN 1132, and PRN 1134.

PRN 1136 Estimating

5005

This course covers fundamentals of estimating costs of printing. Included in the instruction are the role of the estimator, basic cost areas, paper and layouts, preparatory composition, the press, finishing, estimate forms, estimating practice, and use of the Franklin Catalog. Prerequisites: PRN 1133 and PRN 1135.

PRN 1137 Printing Project

0 0 21 7

The printing project will be determined after a conference between the instructor and student. The project will be in an area in which the student has had the fundamentals. Prerequisites: PRN 1133 and PRN 1135.

PSC 101 Introduction to Law Enforcement

5 0 0 5

This is a general course designed to familiarize the student with a philosphy and history of law enforcement, including its legal limitations in a democratic republic, a survey of the primary duties and responsibilities of the various law enforcement agencies, a delineation of the basic processes of justice, an evaluation of law enforcement's current position, and an orientation relative to law enforcement as a vocation. Prerequisite: None.

PSC 102 Criminology

5 0 0 5

This is a general course designed to introduce the students to the social origins of criminal law, the administration of criminal justice, the causes of criminal behavior, and the prevention and control of crime, including the individual rehabilitation and modification of the social environment. Prerequisite: None.

PSC 110 Police Role in Crime and Delinquency

5 0 0 5

This course is primarily concerned with scientific efforts to understand crime and to understand man in relation to crime phenomena. It deals with those definitions and formulations of crime and criminals upon which an adaptation system of criminology must be based. It examines the law as the basic framework within which social deviations of a peculiar character assume their functions as criminal acts and those broad principles upon which a science of criminology must rest. Prerequisite: None.

PSC 115 Criminal Law I

5 0 0 5

This course is designed to present a basic concept of criminal law and to create

appreciation of the rules under which one lives in our system of government. Prerequisite: None.

PSC 116 Criminal Law II

5 0 0 5

This is a continuation of the study of the basic concepts of criminal law and why the law operates in its individual ways, jurisdiction, the criminal act, the mental element, and criminal responsibility. The study proceeds to detailed examinations of the numerous specific criminal areas. Prerequisite: PSC 115.

PSC 120 Administration of Justice

4 0 0 4

This course is a review of court systems; procedures from incident to final disposition; the six primary functional areas for the administration of justice to include police, prosecutor, criminal courts, probation, institutions, and parole; and principles of federal, state, and civil laws as they apply to and affect law enforcement. Prerequisite: None.

PSC 121 Police Science-Seminar and Practicum

3 0 10 4

This is a general course designed to provide the student with an opportunity to pursue, under supervision, work experience in the field of criminal justice, thus providing him motivation and a sense of realism in his field of study. The three-hour seminar each week is devoted to review and discussion of field experiences. Prerequisite: Recommendation of the department chairperson.

PSC 210 Criminalistics I

3 2 0 4

This course introduces the student to the scientific tools (resources) that are used in the study of criminal activity. Principles of biology, chemistry, and physics provide the basis for readings, lectures, demonstrations, and experiments to acquaint the student with the processes involved and the significance of the findings in conducting investigations and in the collection and preservation of evidence. Emphasis is placed upon specific types of offenses such as arson, illegal drugs, sex crimes, larceny, burglary, and homicide. Prerequisite: None.

PSC 211 Criminalistics II

3 2 0 4

This course is a continuation of the study of criminal investigation, including a general survey of the methods and techniques used in modern scientific investigations of crime, with emphasis upon the practical use of these methods by students. Laboratory techniques will be demonstrated, and the student will participate in actual use of the scientific equipment. Prerequisite: PSC 210.

PSC 220 Police Organization–Administration

5 0 0 5

This course is an introduction to principles of organization and administration, discussion of the service functions (for example, personnel management, police management, training communications, records, property, maintenance, and miscellaneous service). Prerequisite: None.

PSY 101 Psychology

3 0 0 3

This course is geared to study the principles of human behavior with reference to thinking, learning, memory, perception, emotional life, individual differences in intelligence, aptitude, personality, the scientific nature of psychological investigations, and research findings related to daily life. Prerequisite: None.

PSY 102 General Psychology

5 0 0 5

This course is a study of the various fields of psychology: the developmental process,

motivation, emotion, frustration and adjustment, mental health, attention and perception, and problems of group living. Attention is given to applications of these topics to problems of study, self-understanding, and adjustment to the demands of society. Prerequisite: None.

PSY 105 Human Growth and Development: Prenatal and Infant 3 0 0 3

This course is a detailed study of the developmental sequence of the prenatal and infant periods with emphasis on developmental influences and conditions necessary for optimal development of individuals. Prerequisite: PSY 102.

PSY 108 Abnormal Psychology

5 0 0 5

This course offers an introduction to behavior pathology. The etiology, diagnosis, and prognosis of abnormal behavior, neurosis, psychosis, character disorders, and psychosomatic reactions are among the topics included in the study. Prerequisite: PSY 102 or equivalent.

PSY 110 Lifespan Psychology

3 0 0 3

This course will deal with the human life span from conception through old age. It is intended to give the student a thorough grounding in the basic principles of developmental psychology. Emphasis will be placed on the theories of Erikson, Piaget and Havighurst. Psysiological and psychological critical periods in the development of the individual will be identified and their implications explored. Special attention will be given to the stress periods of childhood, adolescence, middle age, and old age. Prerequisite: None.

PSY 111 Abnormal Behavior

3 0 0 3

This course offers an introduction to behavior pathology. Students will be given a basic grounding in the etiology, diagnosis, and prognosis of various kinds of abnormal behavior. Topics in the study will include neurosis, psychosis, addiction, suicide, character disorders, psychosomatic reactions, childhood disorders, and geriatric disabilities. Prerequisite: PSY 101.

PSY 112 Personality Development

3 0 0 3

This course is designed to help the student recognize the importance of the physical, intellectual, social, and emotional dimensions of personality. Grooming and methods of personality development are emphasized. Prerequisite: None.

PSY 169 Social Psychology of Health and Illness

3 0 0 3

In studying how culture defines one's responses to illness, both the psychological and sociological factors which play such an eminent part in one's development will be investigated. The cultural principles attributed to illness, symbols of illness, and situations associated with illness not only illustrate how illness affects family patterns and development, but also how such psychological and sociological principles affect patient – professional, family – patient, and family – professional relationships. Prerequisite: None.

PSY 205 Child Psychology

3 0 0 3

The objective of this course is to consider the significant phases of motor, cognitive, emotional, and social development of the child as these are influenced by genetic, cultural, and individual elements from the prenatal period to adolescence. Prerequisite: PSY 101 or PSY 102.

PSY 206 Applied Psychology

3 0 0 3

This is a study of the principles of psychology that will be of assistance in the understanding of interpersonal relationships on the job. Motivation, feelings, and emotions are considered with particular reference to on-the-job problems. Other topics investigated are employee selection, supervision, job satisfaction, and industrial conflicts. Attention is also given to personal and group dynamics so that the student may learn to apply the principles of mental hygiene to adjustment problems as a worker and as a member of the general community. Prerequisite: None.

PSY 1101 Human Relations

3 0 0 3

This course is a development of understanding of relationships to other persons through some of the basic principles of human psychology. Study of the problems of the individual and the work situation in relation to society, group membership, and relationships within the work situation are included. Prerequisite: None.

RDT 113 Departmental Orientation and Ethics and Elementary Radiation Protection

1 0 3 2

This course is designed to introduce the student to the clinical setting. Emphasis is placed upon the functions of the x-ray department and ethics of the medical profession. The basic concepts of radiation protection of both the student and patient are introduced and practiced in the clinical setting. Prerequisite: None.

RDT 114 Basic Essentials of Radiologic Technology

3 0 12 7

The student is introduced to the basic essentials of radiologic technology. Included is a preliminary overview of technical factors, positioning, and radiographic accessories. The student uses the clinical hours to fortify these basic essentials. Prerequisite: RDT 113.

RDT 125 Radiographic Darkroom

2 0 0 2

This course includes lectures, demonstrations, and experiments designed to instruct in the proper use of various photographic chemicals and techniques producing radiographs of highest quality. Prerequisite: None.

RDT 137 Radiographic Technique I

3 0 0 3

This course introduces the student to the basic concepts of radiographic production. Prerequisite: None.

RDT 138 Practicum I

0 2 15 6

Clinical and energized laboratory experience is utilized with special emphasis on the positioning, technique, and accessories used in radiography of the upper and lower extremities. Prerequisite: RDT 114.

RDT 139 Positioning and Related Anatomy I

3 0 0 3

This course will deal with radiographic positioning of the upper extremity, shoulder girdle, foot, ankle, and lower leg. Special emphasis is placed upon the osseous radiographic anatomy of the particular structure. Prerequisites: BIO 108, BIO 115, and BIO 116.

RDT 205 Nuclear Medicine and Radiation Therapy

1 0 0 1

The principles, equipment, and techniques in nuclear medicine and radiation therapy and their application toward the treatment of injury and illness are presented in this course. Prerequisite: None.

RDT 216 Radiation Physics

3 0 0 3

The basic principles behind matter, radioactivity, magnetism, and electricity as related to x-ray technology are presented in this course. Prerequisite: PHY 106.

RDT 233 Seminar I

1001

This course presents a comprehensive study of radiology and the student's role in the medical profession as an x-ray technologist. Prerequisite: None.

RDT 234 Seminar II

1 0 0 1

This course provides an opportunity for the student to do extra research and review in any aspect of technology in which he/she has special interest. Guest speakers will present techniques, routines, and policies to the students as carried forth at their respective hospitals. Prerequisite: RDT 233.

RDT 237 Radiographic Technique II

3 0 0 3

An in-depth study is presented in the selection of exposure factors and the proper use of grids, cones, and other devices which may be employed to produce high-quality radiographs. Prerequisite: RDT 137.

RDT 238 Practicum II

0 2 24 9

Clinical and energized laboratory experience is utilized with special emphasis on the positioning, technique, and accessories used in radiography of the knee, femur, hip, pelvis, and vertebral column. Prerequisite: RDT 138.

RDT 248 Practicum III

0 2 21 8

Clinical and energized laboratory experience is utilized with special emphasis on the positioning, technique, and accessories used in radiography of the skull, sinuses, and mastoids. Prerequisite: RDT 238.

RDT 249 Radiation Protection

1 0 0 1

Protective regulations, monitoring methods, and techniques for reading radiation exposure of patients and technologists are presented in this course. Prerequisite: None.

RDT 250 Special Procedures I

2 0 0 2

This course provides an in-depth study of radiographic procedures employing body section radiography, stereography, dental radiography, etc. Prerequisite: None.

RDT 252 Special Procedures II

2 0 0 2

This course consists of a study of all phases of angiography including cerebral, vascular, and cardioangiography. Prerequisite: RDT 250.

RDT 257 Departmental Administration

1 0 0 1

This course is designed to acquaint the student with the function, organization, supervision, and financial arrangements in the radiology department. Prerequisite: None.

RDT 258 Practicum IV

0 4 24 10

Clinical and energized laboratory experience is utilized with special emphasis on the positioning, technique, and accessories used in radiography of the chest, abdomen, gastrointestinal tract, and other specialized body systems. Prerequisite: RDT 248.

RDT 259 Positioning and Related Anatomy II

3 0 0 3

This course includes radiographic positioning of the proximal lower extremity, hip, pelvis, and the entire vertebral column. Prerequisite: RDT 139.

RDT 261 Pediatric and Operating Room Radiography

1 0 0 1

This course introduces the student to various positions, technical factors, and special problems associated with radiography of infants and children. This course also deals with various procedures encountered during surgery. Prerequisite: RDT 137.

RDT 268 Practicum V

0 2 24 9

Clinical and energized laboratory experience is utilized with special emphasis on the positioning, technique, and accessories used in radiography of specialized radiographic procedures employing techniques such as body section radiography, stereography, etc. Prerequisite: RDT 258.

RDT 269 Positioning and Related Anatomy III

3 0 0 3

This course covers radiographic positioning of the entire skull, to include paranasal sinuses, mandible, and mastoids. Prerequisite: RDT 259.

RDT 278 Practicum VI

0 4 24 10

Clinical and energized laboratory experience is utilized with special emphasis on the positioning, technique, and accessories used in radiography of specialized radiographic procedures including angiographic examinations. Prerequisite: RDT 268.

RDT 279 Positioning and Related Anatomy IV

3 0 0 3

This course is a study of the radiographic positioning of the chest, abdomen, gastrointestinal tract, urinary tract, and other specialized body systems. Prerequisite: RDT 269.

RDT 283 Radiographic Pathology

2 0 0 2

This is a course provided primarily for the x-ray student relating pathological conditions and their appearance on the radiograph. Prerequisite: None.

RDT 289 Film Critique I

1 0 0 1

This course is a review of films obtained by the student with consideration of basic positioning and technique. Prerequisite: None.

RDT 290 Film Critique II

2 0 0 2

This course is an evaluation of diagnostic film quality as related to proper use of radiographic accessories. Prerequisite: RDT 289.

RDT 291 Film Critique III

2 0 0 2

This course consists of a critical analysis of radiographs obtained by the student with emphasis upon special techniques and fluorographic procedures. Prerequisite: RDT 290.

RDT 292 Film Critique IV

2 0 0 2

In this course, the student presents films for critical evaluation of advanced radiographic procedures with emphasis upon visual anatomical structures and pathological conditions. Prerequisite: RDT 291.

RTH 105 Theories and Principles I

4 2 0 5

This course will provide the students with knowledge of gas physics, the need for oxygen, and the control of ventilation. The theories and principles of oxygen and aerosol administration along with types of breathing therapies will be discussed in depth. The cleaning and sterilization of respiratory therapy equipment will also be discussed. Prerequisite: None.

RTH 111 Clinical Experience I

0 0 9 3

The student will assist respiratory therapy personnel in the performance of various duties to include oxygen, humidity, and aerosol therapy, plus the setting up, maintaining, and cleaning of equipment. Prerequisite: None.

RTH 112 Clinical Experience II

0 0 18 6

The student will perform various duties to include oxygen, humidity, and aerosol therapy; the assembly, maintenance, and cleaning of equipment; and the delivery of IPPB therapy, spontaneous nebulizer therapy, and incentive spirometry. Prerequisites: RTH 111 and RTH 105.

RTH 113 Clinical Experience III

0 0 33 11

This course is designed to give the student an opportunity to perform and demonstrate knowledge gained in parallel courses. The student will receive clinical experience in pulmonary function testing, arterial blood gases, chest physiotherapy, and mechanical ventilation. Critical care will be stressed during this clinical experience. Prerequisite: RTH 112.

RTH 123 Clinical Experience III

0 0 9 3

This course is designed to give the student the opportunity to perform and demonstrate knowledge gained in parallel courses. The student will receive clinical experience in chest physiotherapy and blood gas analysis. Prerequisite: RTH 112.

RTH 139 Cardiopulmonary Anatomy and Physiology

3 0 0 3

This course consists of a concentrated study of the structure of the respiratory system and its physiological relation to the heart and blood vessels. The student shall gain a deeper knowledge and be given a more sophisticated approach to these systems. Prerequisite: BIO 108.

RTH 145 Theories and Principles II

2 2 0 3

This course is designed to teach the respiratory therapy technician the theories and principles of chest physiotherapy and basic pulmonary function testing. Arterial blood gases and basic respiratory and hemodynamic monitoring will also be covered. Prerequisite: RTH 205.

RTH 155 Critical Care

3 0 0 3

This course will provide the student with the skills necessary for the care of the critically ill patient. Topics to be covered will include the intensive respiratory care of the adult, pediatric, and neonatal patient. Ventilators and other equipment used in critical care will be discussed. Prerequisite: RTH 205.

RTH 205 Pulmonary Diseases

4 0 0 4

The etiology, classification, diagnosis, progression, treatment, and prognosis of the most frequently encountered pulmonary diseases will be discussed. Prerequisite: RTH 105.

RTH 211 Pediatrics

2 0 0 2

Normal growth and development and anatomy and physiology of the newborn through pediatric age groups will be discussed. Disease process of the neonate and pediatric patient will be covered. Mechanical ventilation and critical care of these patients will be discussed in depth. Prerequisites: RTH 205 and RTH 269.

RTH 215 Ventilators

2 2 0 3

The technical aspects of ventilator care will be taught. Emphasis will be placed on maintenance, assembly, and operation of the machines used. Prerequisite: RTH 105.

RTH 218 Clinical Experience IV

0 0 18 6

This course is designed to give the student the opportunity to perform and demonstrate knowledge gained in parallel courses. The students will receive clinical experience in intensive respiratory care to include experience in continuous mechanical ventilation. Prerequisite: RTH 123.

RTH 228 Clinical Experience V

0 0 18 6

This course is designed to give the student the opportunity to perform and demonstrate knowledge gained in parallel courses. The student will receive clinical experience in neonatal intensive care, care of the pediatric patient, intensive care of the pediatric patient, and pulmonary function testing. Prerequisite: RTH 218.

RTH 233 Chest Physiotherapy

1 2 0 2

The student will be taught methods of evaluation of pulmonary patients. Techniques of breathing exercises, segmental bronchial drainage, and chest percussion in the adult and pediatric patient will be stressed. Prerequisite: RTH 205.

RTH 238 Clinical Experience VI

0 0 33 11

This course is designed to give the student further clinical experience in areas he/she has already had rotations through. The student will also be introduced to respiratory and hemodynamic monitoring techniques. Critical care will be stressed during this rotation. Prerequisite: RTH 228.

RTH 241 Respiratory Therapy Department Operations

2 0 0 2

The student will work independently and as a team member in the development of a theoretical respiratory therapy department. Budget planning, space requirements, equipment purchase decisions, charges, and personnel management will be discussed. Prerequisite: RTH 228.

RTH 250 Intensive Respiratory Care

3 0 0 3

This is a course involving mechanical ventilation and intensive respiratory care of patients with various medical and surgical problems. Airway control, physical diagnosis, mechanical ventilation, and intensive care of patients will be discussed. Prerequisites: RTH 205 and RTH 269.

RTH 257 Respiratory and Hemodynamic Monitoring Techniques 3 0 0 3

This course is designed to give the respiratory therapy student a broad background and understanding of the various respiratory and hemodynamic monitoring modalities in use today. Arterial and venous pressure monitoring, Swan-Ganz catheterization, medical mass spectrometry, and equipment calibration techniques will be stressed. Prerequisite: RTH 269.

RTH 268 Pulmonary Function

3 0 0 3

This course is designed to provide the respiratory therapy student with a comprehensive knowledge of diagnostic pulmonary function testing. Technical theory, manual calculation, and interpretation of each diagnostic test will be presented. Prerequisites: RTH 205 and RTH 269.

RTH 269 Cardiopulmonary Pathophysiology

4 0 0 4

This course is designed to acquaint the student with normal and abnormal physiological functions associated with pulmonary and cardiovascular disease processes. Prerequisites: RTH 205 and RTH 139.

RTH 287 Respiratory Therapy Pharmacology

1 0 0 1

This course is designed to provide the student with a basic working knowledge of respiratory therapy medications. Pharmacological effects, indications, contraindications, and drug interactions and side effects will be discussed. Prerequisite: None.

SAF 3005 Cardiopulmonary Resuscitation (CPR)

0 0 0 0

This is a 12-hour course teaching the proper and up-to-date techniques of the method of cardiopulmonary resuscitation. The course includes classroom and laboratory learning techniques. Prerequisite: None.

SCI 101 General Science

3 0 0 3

This is a study of the basic concepts from biological, physical, and natural sciences. Prerequisite: None.

SOC 010 Study Skills

3 0 0 0

The objective of this course is to help the student determine achievement levels and learning style, plan learning strategy, and develop learning skills necessary for effective academic success. Opportunity for self-assessment will be provided through standardized tests and individual profile interpretation. A variety of study techniques will be presented with special emphasis on using textbooks properly, taking and organizing notes, flash cards, effective examination skills, and library techniques. Prerequisite: None.

SOC 020 Academic Survival Skills

2 0 0 0

This course is designed to encourage the student to accept the responsibility for his/her own academic success through identifying learning styles and planning effective learning strategies. Reading skills, listening skills, note-taking skills, and test-taking skills will be explored. Prerequisite: None.

SOC 100 Sociology I

0 4 0 2

This course is the recognition and development of human potential through emphasis on positive achievements, characteristics, and attitudes. Beginning sessions will seek to establish for each student those things about himself/herself that he/she can like and take pride in. Early in the course students will begin a process of establishing short-term goals. Other positive processes will include an analysis of strengths, identification of personal values, recognition of latent potential, and establishment of long-range goals. Prerequisite: None.

SOC 101 Sociology II

0 4 0 2

This course is a continuation of the process begun in SOC 100 Sociology I, with more in-depth analysis of individual potential and more emphasis on long-range goal establishment. The student will be encouraged to be aware of his/her feelings and to utilize them to advantage. Honest self-appraisal, development of self-confidence, and positive self-image are primary objectives. Prerequisite: None.

SOC 102 Principles of Sociology

5 0 0 5

This is an introductory course in the principles of sociology. An attempt is made to provide an understanding of culture, collective behavior, community life, social institutions, and social change. It presents the scientific study of man's behavior in relation to other men, the general laws affecting the organization of such relationships, and the effects of social life on human personality and behavior. Prerequisite: None.

SOC 103 Sociology

3 0 0 3

The student will examine the social environment in which personality matures and will analyze the major social institutions as well as the major social processes. Attention is given to the scope, methods, and concepts of sociology. Prerequisite: None.

SOC 105 Families in the American Culture

3 0 0 3

This course is the study of the family in the American culture, changing patterns in family roles, the influence of socioeconomic status on family relationships, factors associated with cultural deprivation, and the effects on children in such families. Prerequisite: SOC 103.

SOC 209 Social Problems

3 0 0 3

This is an analysis of modern social organization and disorganization as they relate to various social problems in contemporary American society. Prerequisite: SOC 102.

SOC 210 Minorities in American Society

3 0 0 3

This is a study of the historical and scientific questions of race, sociocultural patterns in various interracial areas, and inquiry into the problems of conflict adjustment. Prerequisite: None.

WLD 1101 Basic Gas and Arc Welding

1 0 3 2

The course includes welding demonstrations given by the instructor and practice by the students. The safe and proper methods in the setup and operation of welding equipment are demonstrated. Practice is given in joining metals by torch welding, brazing, silver soldering, soft soldering, and shielded metal arc mechanical repair work. Prerequisite: None.

WLD 1105 Introduction to Shielded Metal Arc Welding

1 0 3 2

This course will place emphasis on safety aspects of shielded metal arc welding equipment, materials, and procedures. Special consideration will be given to electrode identification and application. Practical application will include an orientation to and comparison of MIG and TIG processes and equipment relative to auto and truck body repair. Prerequisite: None.

WLD 1111 Air Conditioning Welding

1 0 3 2

This course includes welding demonstrations by the instructor and practice by the students. The safe and proper methods in the setup and operation of welding equipment are demonstrated. Practice is given in brazing, braze welding, and hard and soft soldering of ferrous and nonferrous metals. Flame cutting methods are practiced as applicable to mechanical repair work that the air conditioning technician will encounter in the field of work. Prerequisite: None.

WLD 1113 Mechanical Testing and Inspection

0 3 2

This course covers the standard methods for mechanical testing of welds. Types of tests covered are bend, destructive, free-bend, guided-bend, nick-tear, notched-bend, tee-bend, nondestructive, V-notch, and Charpy impact. Prerequisite: None.

WLD 1120 Oxyacetylene Welding and Cutting

4 0 15 9

This course provides an introduction to the history of oxyacetylene welding, the principles of welding and cutting, nomenclature of the equipment, and assembly of units. Welding procedures such as practice of puddling and carrying the puddle, running flat beads, butt welding in the flat, vertical, and overhead positions, brazing, and hard and soft soldering are covered. Safety procedures are stressed throughout the program of instruction in the use of tools and equipment. The performance of mechanical testing and inspection to determine quality of the welds is made. Prerequisite: None.

WLD 1121 Basic Arc Welding

4 0 15 9

The operation of AC transformers and DC motor generator arc welding sets is covered in this course. Studies are made of welding heats, polarities, and electrodes for use in joining various metal alloys by the arc welding process. After the student is capable of running beads, butts, and fillets, welds in all positions are made and tested in order that the student may detect any weaknesses in welding. Safety procedures are emphasized in the use of tools and equipment. Prerequisite: None.

WLD 1123 Inert Gas Welding

1 0 6 3

This course provides an introduction and practical operations in the use of inert gas-shielded arc welding. A study of the equipment, operation, safety, and practice in the various positions is made. A thorough study of such topics as principles of operation, shielding gases, filler rods, process variations and applications, and manual and automatic welding are also made. Prerequisite: WLD 1121.

WLD 1124 Advanced Arc Welding

3 0 12 7

This course includes extensive practice in the welding of different metals in all positions. The micro-wire welding process and a thorough study of such topics as principles of operation, nomenclature of machine, filler metals, and shielding gases for the certification procedures and practices are covered. Prerequisite: WLD 1121.

WLD 1126 Advanced Inert Gas Welding

3 0 9 6

This course is a continuation of WLD 1123 Inert Gas Welding with more theory and practice in inert gas welding. Both ferrous and nonferrous welding applications are covered. Inert spot welding, CO₂ welding, gas—metal arc, MIG pipe welding, and automatic welding are taught. Special consideration is given to shielding gases and certification procedures. Prerequisite: WLD 1123.

WLD 1127 Introduction to Pipe Welding

1 0 6 3

This course is designed to provide practice in the welding of pressure piping in the horizontal, vertical, and horizontal-fixed positions using shielded metal arc metal processes according to the ASME code. Prerequisite: WLD 1124.

WLD 1130 Applied Basic Arc and Gas Welding

1 0 6 3

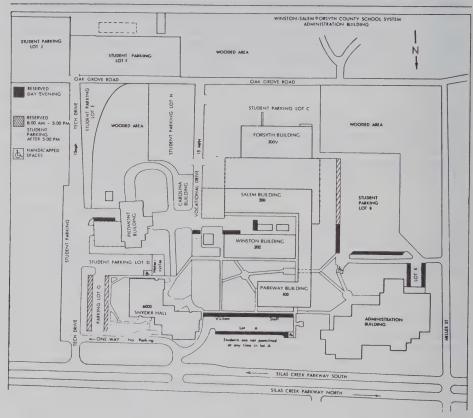
This course includes welding demonstrations given by the instructor and practice by the students. The safe and correct methods of assembling and operating welding equipment are emphasized. Practice is given in joining and surfacing of ferrous metal by brazing, braze welding, and fusion welding. The effects of expansion and contraction are covered to minimize warpage of auto body components. Oxyacetylene flame cutting is practiced as applicable to auto body and chassis repair work. Prerequisite: WLD 1105.

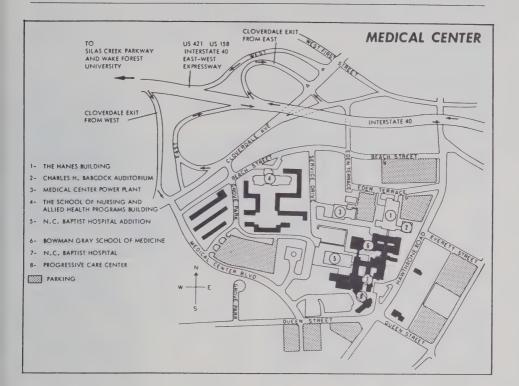
WLD 1131 Applied Inert Gas Welding

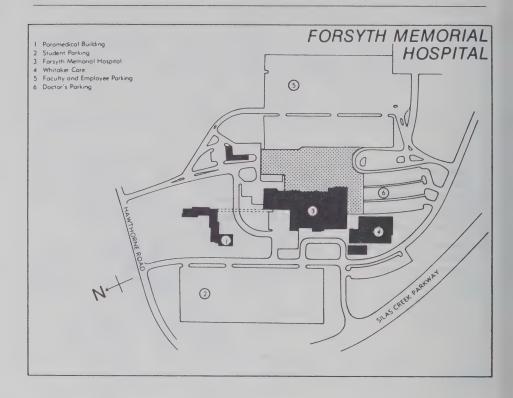
2 0 3 3

This course includes an introduction and practical operation of the inert gas welding processes. A study of the principles of operation of shielding gases, filler metals, MIG guns, TIG torches, and TIG spot guns will be covered. Special attention is given to the joining of thin metals, both ferrous and nonferrous. Safety procedures are emphasized throughout the course. Prerequisites: WLD 1130 and WLD 1105.

MAIN CAMPUS







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